The National Safeman™

Summer 2010

SECURAM

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The official publication of the National Safeman's Organization

Safes are Hot and Google Can Help

Marc Goldberg

Recently I met with a safe manufacturer who told me that business is good. So many companies have suffered setbacks due to the economy that it's nice to find a sector that is performing well.

This company told me that the economy has favored them because those who have valuables want to secure them more than ever. So if you have been thinking about adding sales of new safes to your service work, now is the time.

In researching safe and vault companies on Google, I found many listed in the Google AdWords section. It is very difficult to come up at the top of Google search results without paying to be a sponsored link. Yet, many customers who are searching for a service technician in your area will type their request into Google when trying to find someone like you.

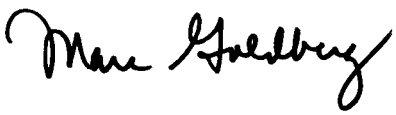
Ideally, your web page comes up first in the free listings. But as I said, it is very tricky to make that happen, and most web sites will never rank first, or even on the first page. Yet, for a small advertising budget, you can place your web site link at the top of Google. You can easily control how much you spend with Google, even on a daily basis. Even a few dollars a day will increase your sales. As little as three dollars per day can net you real income increases.

Go to Google.com. Under the search box, click on the link for Advertising Programs. On the next page, click Google AdWords. An easy guide will walk you through how to set up a budget and create an ad. Within an hour or so, you can be coming up on the first page of search results for your locale.

It is important to anticipate what search phrases your customers type into Google when looking for companies like yours. A search term assistant will help you figure that part out as you design your AdWords account.

Commit to spending $90 or $100 per month now with Google, and your phone should start ringing. You can cancel or increase your ad any time you want. But this form of advertising is FAR cheaper than phone books, and the responses are way more immediate. If you'd like to learn how your web site can also make you money, then explore Google AdSense. Google will place relevant ads on YOUR site…and pay you every time those ads are clicked. You can lock out your major competition, but the money you earn will help pay for the ads you run.

All in all, Google is ready to help get you new business. Safes are hot right now and if you play it right on the internet, you can pocket some of these dollars.



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Summer 2010

DIRECTOR'S PAGE

Dave McOmie

In This Issue

We have been a little slow to cover some of the e-locks that are becoming more and more popular. In this issue we take a corrective step and devote our pages to SecuRam. Globaloks will be next, and LP will soon follow. Thanks for your patience. I think the reward will be worth the wait.

Burglaries

Look at the safes on this page and the next. All four were cut into rather quickly by a burglary ring working Texas and the south. Notice the clean overcuts on all four. There have been several dozen of these attacks, and whoever is doing it has at least a basic knowledge of safe construction, because they are targeting TL-30s, and leaving the six-sided safes alone.

BL-2 Battery

I am frequently asked if there is a recommended

CR123A battery for the BL-2 light source. I can tell you my preferences: For lithium batteries, I prefer the Sanyo. Go to eBay and search "Sanyo 123 batteries" and a bunch of their "Advanced Lithium II" auctions will pop up. They run two to three bucks apiece, depending on seller and quantity. You cannot go wrong here, as the shelf life on these is years long. For rechargeable batteries, again, go to eBay and do a search for "Nano 123 battery charger" and another for "spiderfire 123 protected battery." The charger is about six bucks with free shipping from China (no kidding!) and the batteries vary in price, depending on quantity. For eight rechargeables I paid $28 with free shipping. Note: cheaper rechargeables can be found, but whatever you buy, make sure the batteries are protected from overcharging. I bought eight, because I have five BL-2s in three scope cases, and needed eight batteries to fill the BL-2s and put one spare in each case. If you need only two or even four, you can get set up with a charger and batteries for less than $20, and never have to buy another one for the rest of your life.

Dave McOmie

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Dave McOmie
cordially invites you to

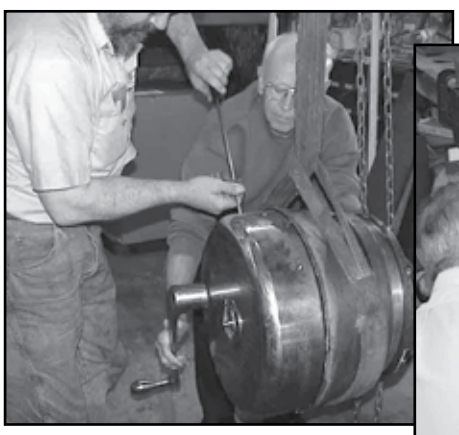
Penetration Party 2010!

Dave is on the road again, to a number of states this spring. To find out when and where, go to www.davemcomie.com. (As of this writing, dates have not been selected, but by the time you read this, everything will be set.)

Each Party is held over a weekend, with a full day of hands-on safecracking on Saturday, and half to a full day on Sunday, depending on if and when the locked safes run out. Each morning begins with a brief lecture, followed by a Q&A session where you can ask Dave anything you ever wanted to know about opening safes. Then it's Party Time!

Dave will bring almost no equipment, so you are encouraged to bring common hand tools, your favorite tools, and your own scopes. If you do not have scopes, never fear, for Dave will bring a nice selection of medical-grade scopes for sale at well below wholesale prices. Typically our industry tool suppliers spoil us at PenParties with fabulous door prizes, and there is always a drawing on Sunday for the goodies, which in the past have ranged from Mini-Rigs to Hawkeyes and just about everything else you can imagine.

Each Penetration Party is strictly limited to 24 participants. Priority is given to NSO members, but the best way to ensure a spot is to send your completed application and check today. Lunch is provided both days. Each day begins at 9am, and ends whenever it ends. On more than one occasion, Saturday has ended after Cinderella turned into a pumpkin! Sunday usually knocks off in the late afternoon.



COST

Veteran Partyers*: $275

NSO Members: $325

LOCATION & DATE

See www.davemcomie.com for details.

**A Veteran Partyer is one who has attended a previous Penetration Party hosted by Dave McOmie.*

PLEASE reserve a place for me at a **Penetration Party!**

I have enclosed the correct amount and I am eagerly waiting for my info packet.

❑ I am a Veteran Partyer* and an NSO Member. Enclosed is my check for $275.
I attended a previous party at: _____ My NSO # is: _____

❑ I am an NSO Member. Enclosed is my check for $325. My NSO # is: _____

❑ I am not an NSO Member. Enclosed is my check for $375.

Your Name _____ Shop Name _____

Street Address _____ Email Address _____

City, State and Zip _____

Home Phone _____ Shop Phone _____ Fax _____

Your experience level (circle one) novice advanced novice journeyman expert

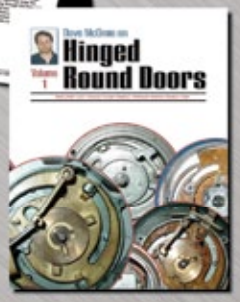
Do you need hotel, flight info, or driving directions to the Party? (circle one) yes no

Send application and check to: **Dave McOmie • 4549 NW Aspen St. • Camas, WA 98607**

NEW!

from Dave McOmie
HINGED ROUND DOORS *Volume 2*

- *Volume 2 covers Hinged Round Doors, alphabetically Gross-Feibel through York (Volume 1 covers Amsec/Star through Gary, and the upcoming Volume 3 covers Mosler) Hinged round doors include lug doors, non-lug doors, depository doors, wall safes, and more!*
- *The book includes a 55 page "Introduction to Safecracking" that alone is worth double the cost of this book.*
- *Every safe in the book has Drill Points, Relocker Drill Points, Special Notes (where applicable), Identification Tips, and much much more.*
- *Hundreds and hundreds of actual hinged round door openings are covered in this series, with step-by-step documentation that walks the reader through each opening as if he were on the job with Dave!*
- *This book is nearly 400 pages long, one of the biggest safe opening books ever published!*



Volume 1 is over 300 pages of action packed photos. opening tips, instructions, drill points, and more. Hundreds of photos of doors and the guts. See what's under the covers, the lock, the wheels, fence and lever. A must have for every safe technician!

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OID 05/09

SecuRam

SecuRam has been in the United States for more than four years. There have been three versions of their e-lock, which they refer to as an "electronic swing bolt actuator," and it has been UL-Listed since 1998. All three locks are covered in this issue.

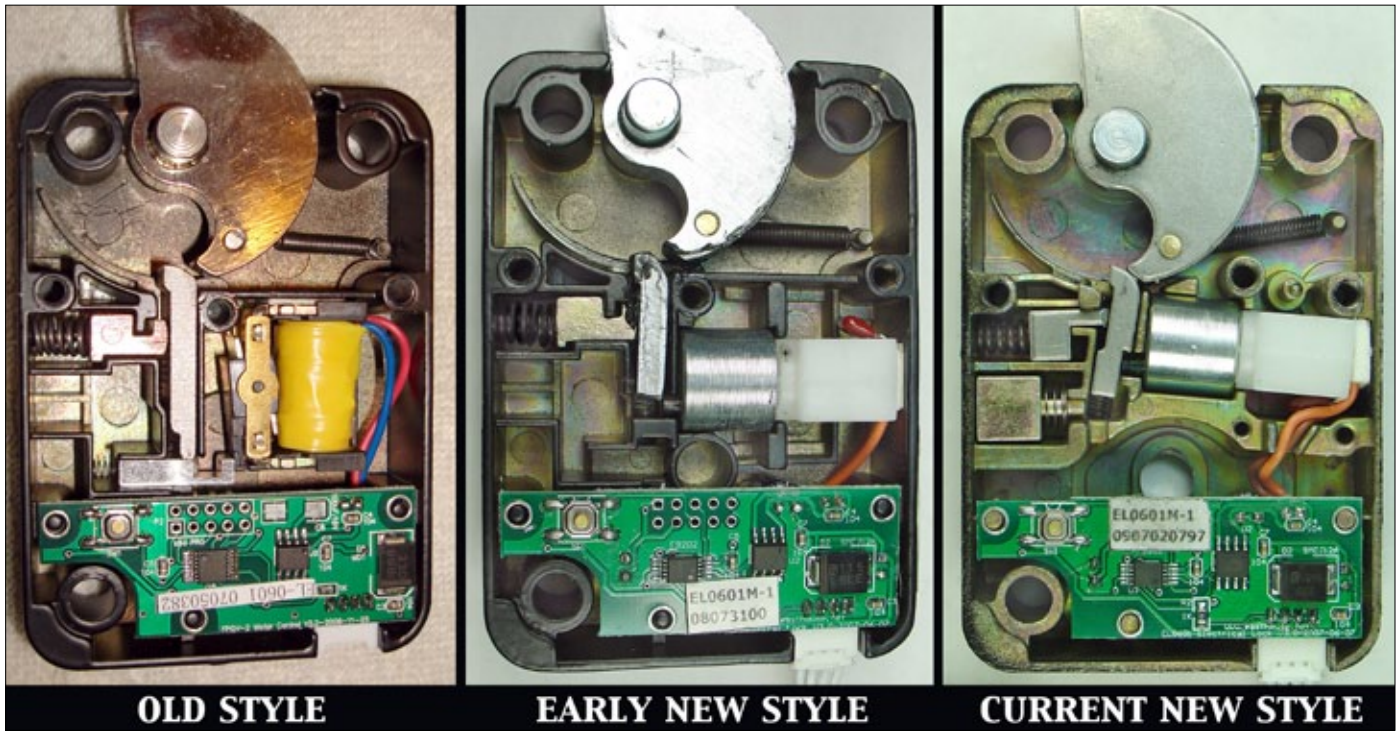
Overview: SecuRam

SecuRam has two different alphanumeric and two different biometric keypads, all shown here. The keypads bear the SecuRam name, which makes identifying the maker nice and easy.

The cover side of each of the three different e-locks SecuRam has made over the past four years. You will notice several differences in the cases above, but these differences simply cannot be seen down the spindle hole, not even with a scope. There isn't enough of a gap between lockcase and safe door to peek through. Notice RESET hole on each lock. To reset a SecuRam to the factory default code, use a pencil or some kind of poke tool and push the reset switch through the hole in the lockcase. Hold it down until you hear two beeps. Release. The lock will now be set to either 1-2-3-4-5-6 or 1-1-1-1-1-1 (SecuRam has used both as default factory codes.)

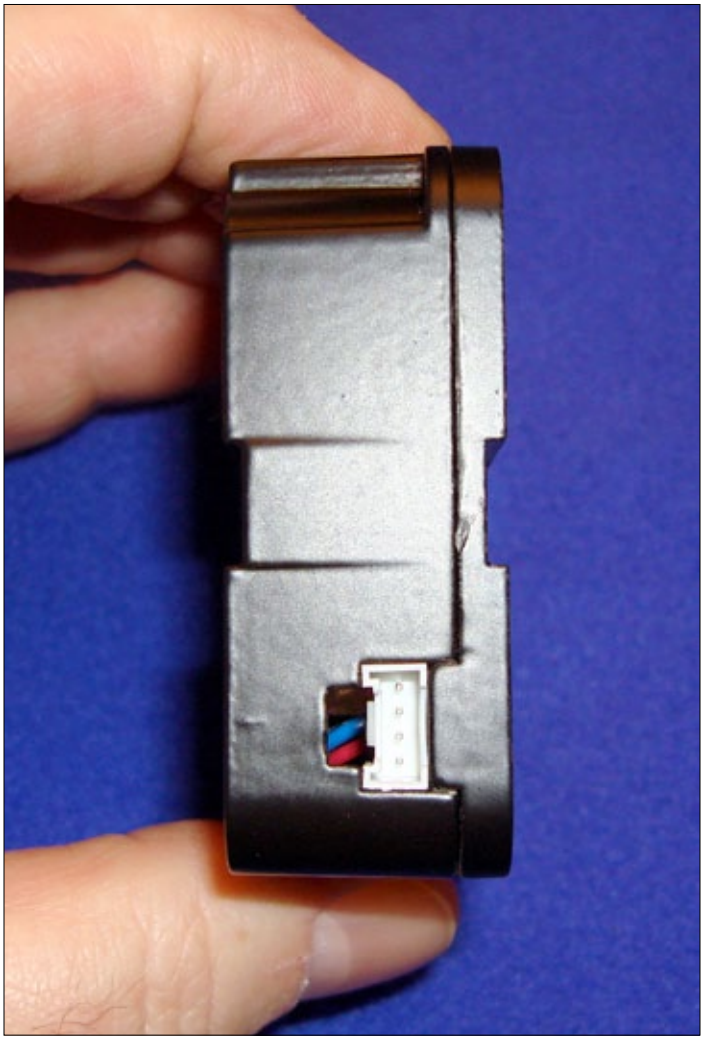
Other side of the three lockcases. Not much difference on this side.

Back covers. Although they are all very different, each of them has an arm that extends down to keep the swingbolt return spring on its post.



When it comes to distinguishing these three locks, we are very lucky: the drill points are identical, whether old-style or early new-style or current new-style. So, as a practical matter, it doesn't really matter whether the lock we are facing is old-style or new-style, since our DP does not change. As we will see, when it comes to openings, we have two drill points: a spindle hole attack (which can be a physical defeat or a spike), and a conventional attack on the sidebar.

◀ *These are all reversible locks, so the lockbolt will be centered depth-wise in the case, so that it remains the same distance off the door no matter which side of the lock is against the door.*



▶ *Edge of case on plug side.*

Quick Facts

Default Manager Code: 1-1-1-1-1-1

Default User Code: 1-2-3-4-5-6

The opening window is approximately four seconds, after which the lock will re-lock.

Reset to Factory Code: push and hold Reset switch until double beep. Lock is now reset.

Change Code: enter 0-0-0-0-0-0, then old code, then new code, then new code. Note: this process works for changing a manager code as well as a user code. Whatever code you enter as the "old code" is the code that will be changed. Single beep indicates valid entry. Triple beep indicates that the code changing process has failed, and the lock is still set to the old code.

Wrong Try Penalty: Four consecutive invalid codes puts the lock in penalty mode for five minutes, during which the lock will beep at five-second intervals. Removing and reinstalling battery does not bypass penalty.

Keypad Removal: Lift up and away, like LaGard. Note: cable runs in opposite direction from lockbolt.

Spindle Hole Opening?

Old Style: Yes. For a manual probe of sidebar blocker, see page 30.

Early New Style: Yes. For a spiking reset and possible motor spike, see page 35.

Sidebar Drill Point: 1-1/8" toward lockbolt, 1/4" toward flat side of lockbolt. MiniRig users: Template 3, Hole O or Hole P, depending on which way the lock is mounted.

Add User 1.

a. Enter Manager Code and hold down last digit of code until a single beep and then a double beep sounds.

b. If there is no existing User 1 code, push "1" and one beep will sound, which indicates the lock is ready to accept a User 1 code. Note: a double beep indicates that a User 1 code already exists and has just been enabled.

c. Enter a new six-digit code. One beep will sound.

d. Enter the new six-digit code again. One beep will sound, which indicates success. A double beep indicates failure — start over.

Disable User 1.

a. Enter Manager Code and hold down last digit of code until a single beep and then a double beep sounds.

b. Push "2" and a double beep sounds, indicating that User 1 has been disabled.

Delete User 1.

a. Enter Manager Code and hold down last digit of code until a single beep and then a double beep sounds.

b. Push "3" and a double beep sounds, indicating that User 1 has been deleted.

Add User 2.

a. Enter User 1 Code and hold down last digit of code until a single beep and then a double beep sounds.

b. If there is no existing User 2 code, push "1" and one beep will sound, which indicates the lock is ready to accept a User 2 code. Note: a double beep indicates that a User 2 code already exists and has just been enabled.

c. Enter a new six-digit code. One beep will sound.

d. Enter the new six-digit code again. One beep will sound, which indicates success. A double beep indicates failure — start over.

Disable User 2.

a. Enter User 1 Code and hold down last digit of code until a single beep and then a double beep sounds.

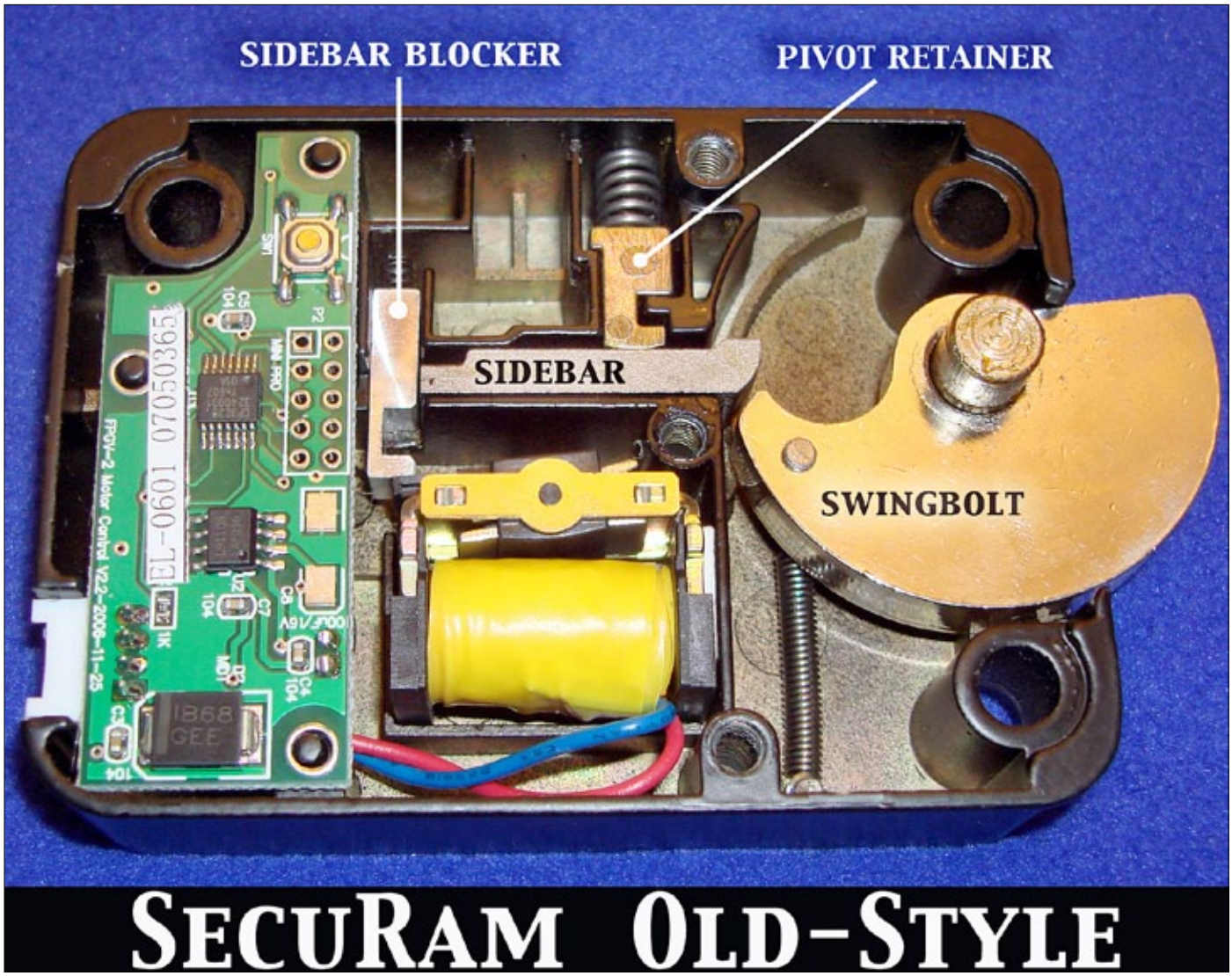
b. Push "2" and a double beep sounds, indicating that User 2 has been disabled.

Delete User 2.

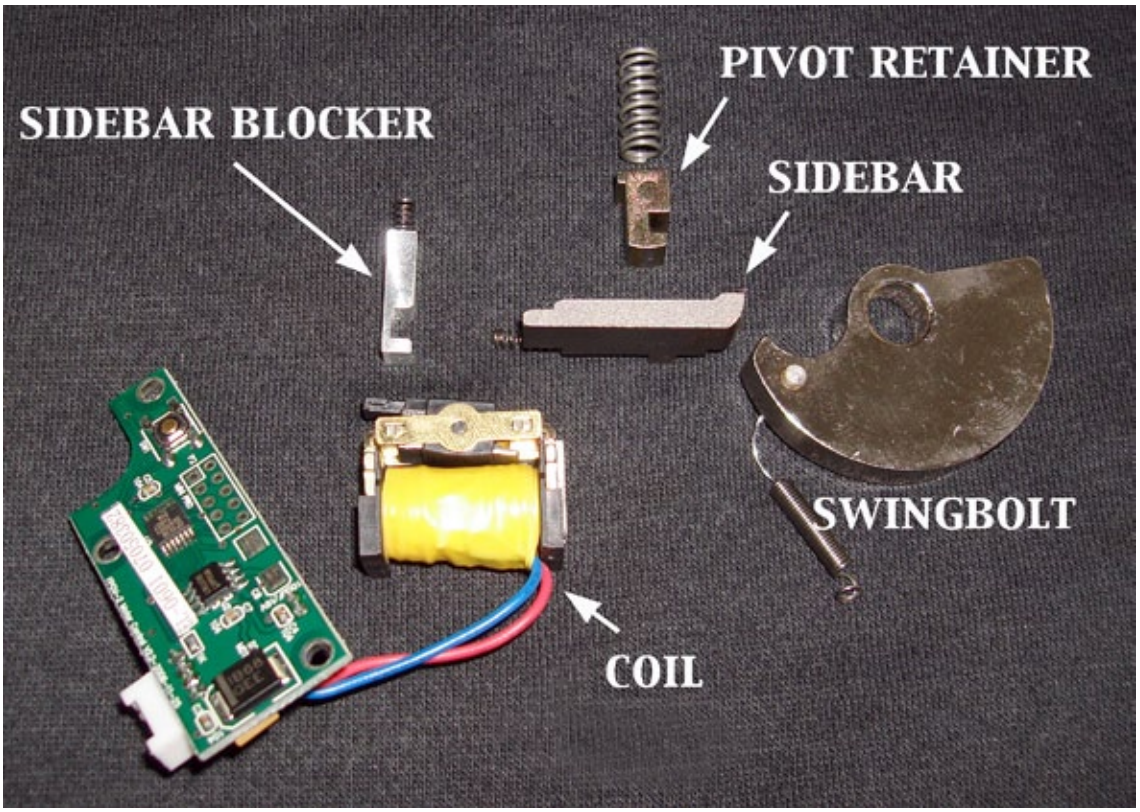
a. Enter User 1 Code and hold down last digit of code until a single beep and then a double beep sounds.

b. Push "3" and a double beep sounds, indicating that User 2 has been deleted.

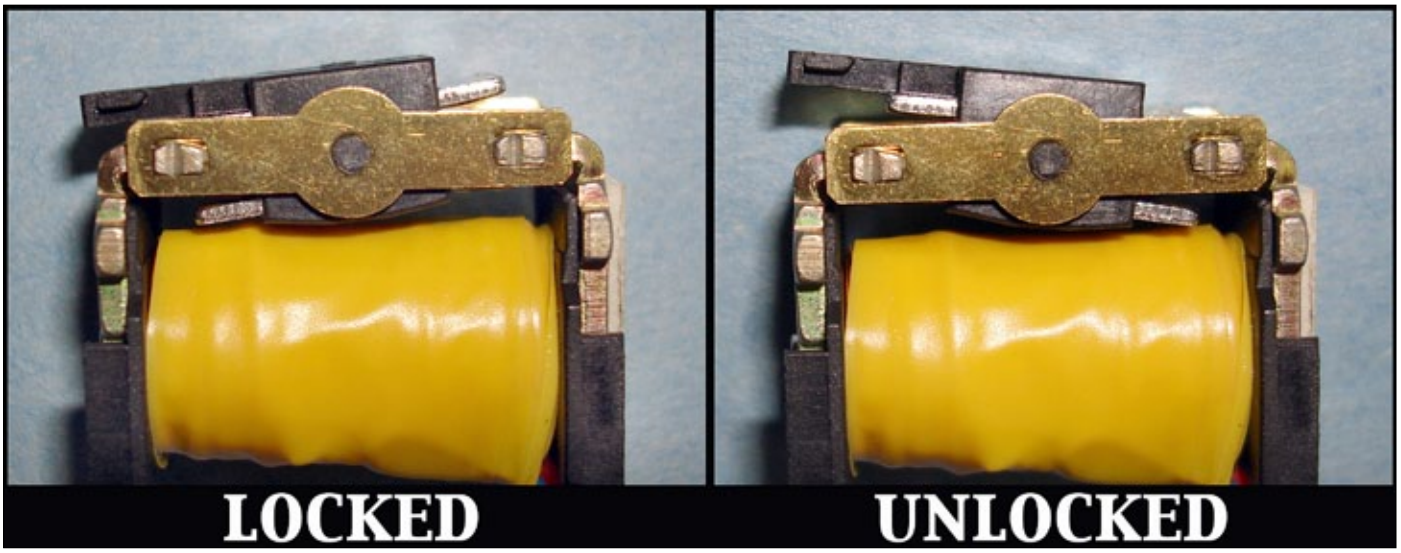
Old-Style



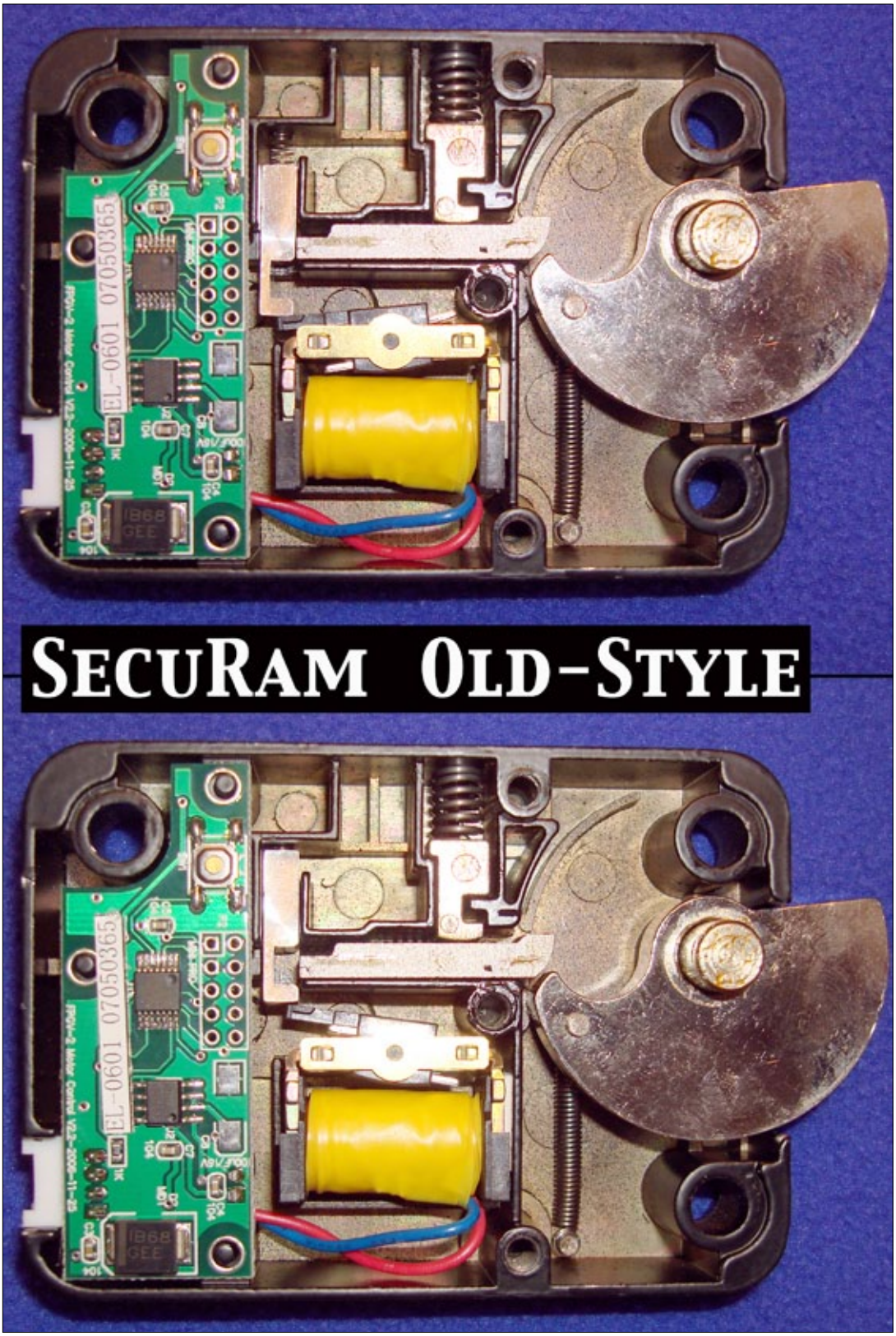
Old-style SecuRam. Swingbolt is blocked by sidebar. Sidebar is blocked by the aptly named sidebar blocker. When sidebar blocker is moved so that its cutout is aligned with the sidebar, the safe's handle can be thrown, which will cause the swingbolt to pivot, pushing the sidebar into the cutout in the blocker. I do not know why this lock has the component we are calling (somewhat inaptly) a "pivot retainer." In a LaGard swingbolt, for example, the pivot retainer prevents the swingbolt from pivoting when too much force is applied; the swingbolt locks into a notch in the case to prevent trauma to the solenoid pin. In this lock, too much force on the swingbolt causes the sidebar to move up where its dogleg tip locks into the case. But I fail to see what component is being protected. The sidebar blocker is every bit as solid as the sidebar itself. 'Tis a mystery.



The components, removed from the lockcase.



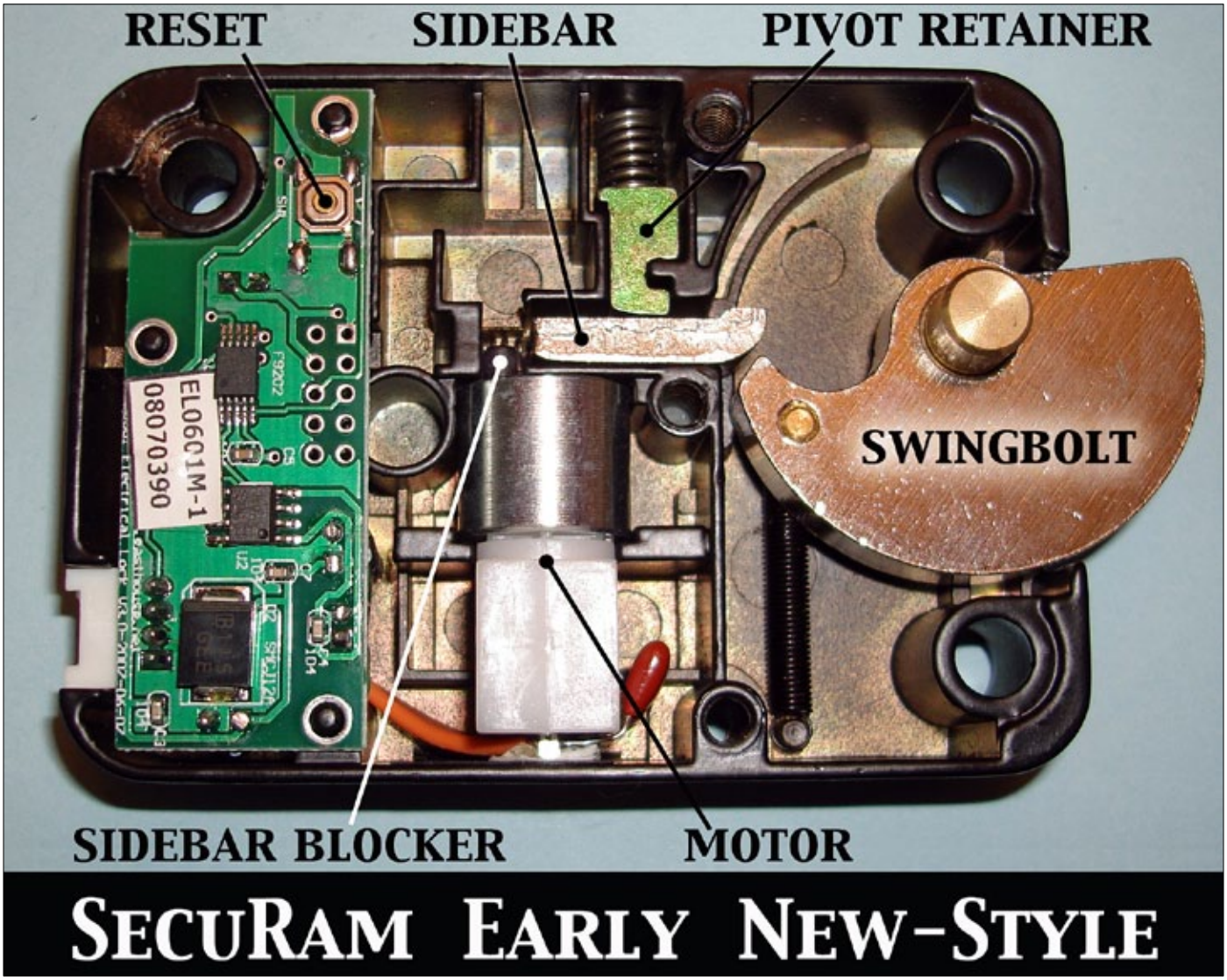
In case it isn't clear in the previous photos, the sidebar blocker is moved up by the plastic leg on the coil, and down by its own spring. When the correct code is entered, the coil is energized and the leg kicks up, pushing the sidebar blocker up so that its cutout is aligned with the sidebar.



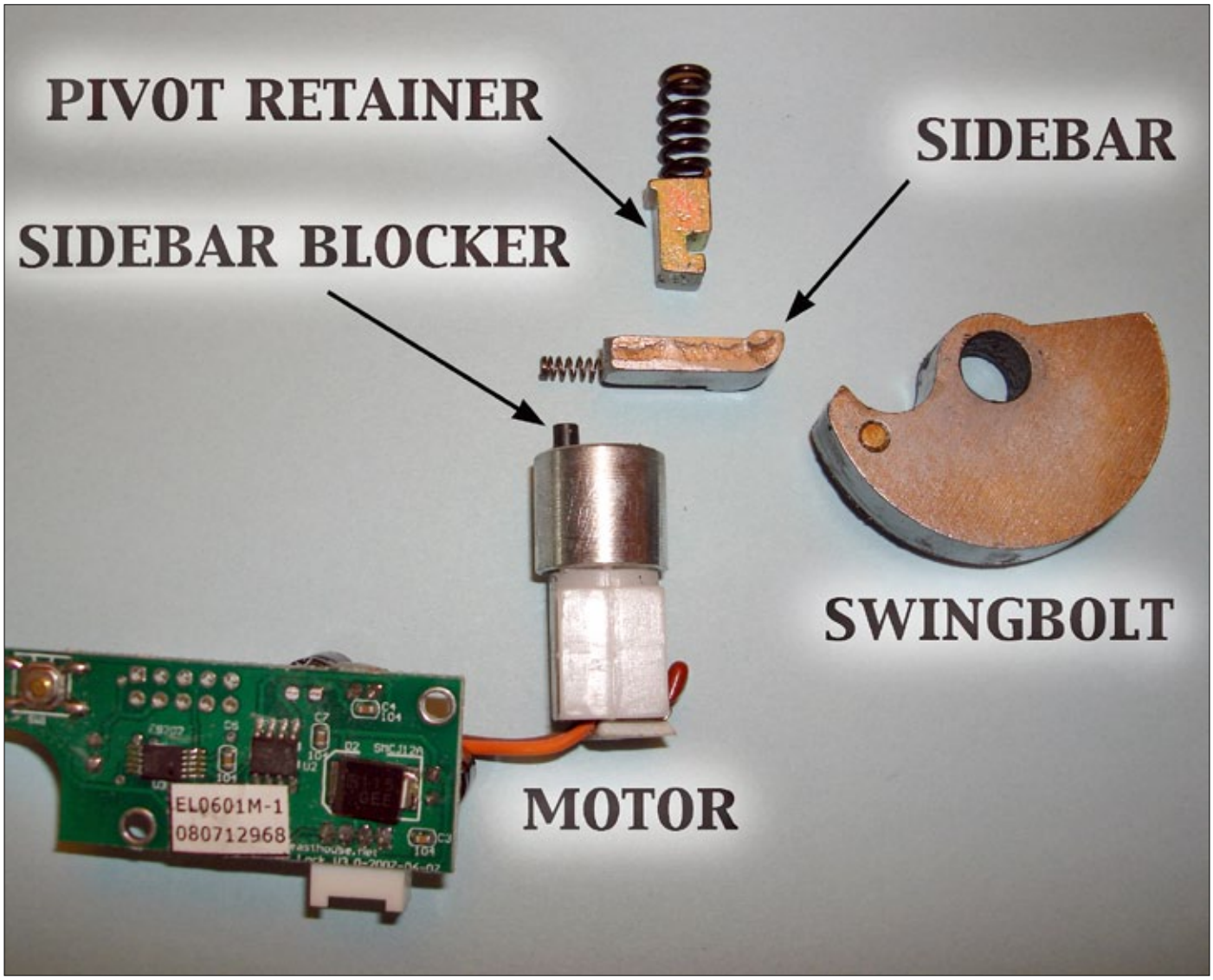
◀ *Locked position.*

◀ *Sidebar blocker has moved into position to accept the sidebar into its cutout. In this position, the handle can be thrown.*

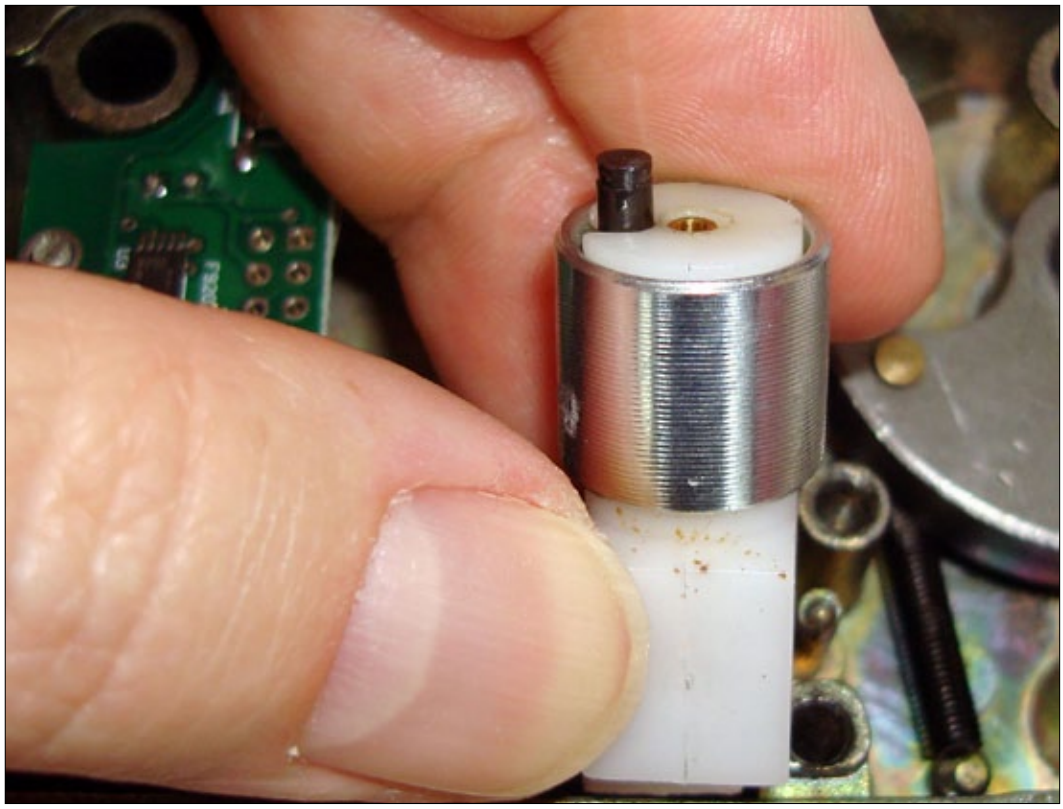
Early New-Style



This is the early new-style lock. Notice that the motor and sidebar sit at square angles to the lockcase. Nothing looks tilted. Also, notice the tube at spindle center. This tube will have no effect on spiking or resetting a VU lock, but it will have to be dealt with when the lock is mounted VD. The DP for the sidebar is 1-1/8" toward lockbolt, 9/32" toward the flat side of the lockbolt.



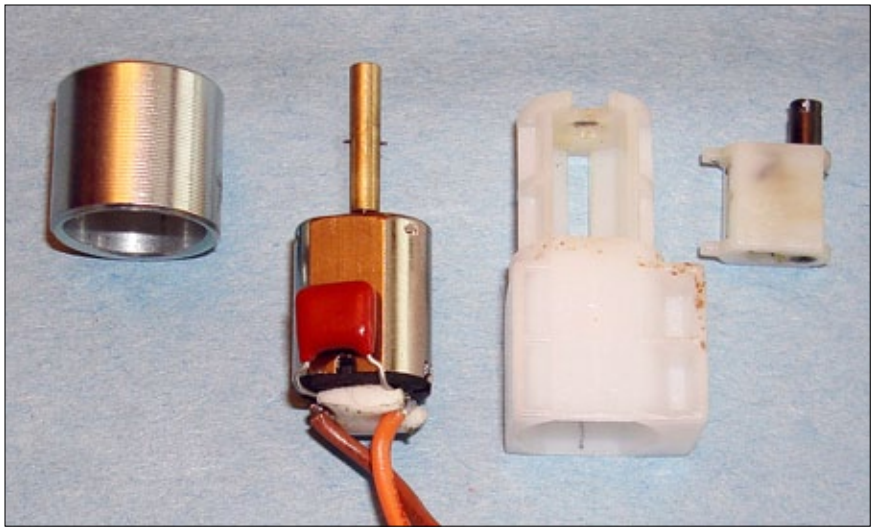
The components, removed from the lockcase. The most dramatic change from old-style to new-style is in the sidebar blocker. No longer a solid piece of metal controlled by a coil, the sidebar blocker is now a tiny round pin controlled by a motor. The second biggest change, in my eyes, is that now the pivot retainer makes sense. When too much pressure is applied to the swingbolt, the sidebar overcomes the pivot retainer spring and locks up against the case. Without a pivot retainer, handle pressure would likely snap off the tiny round sidebar blocker.



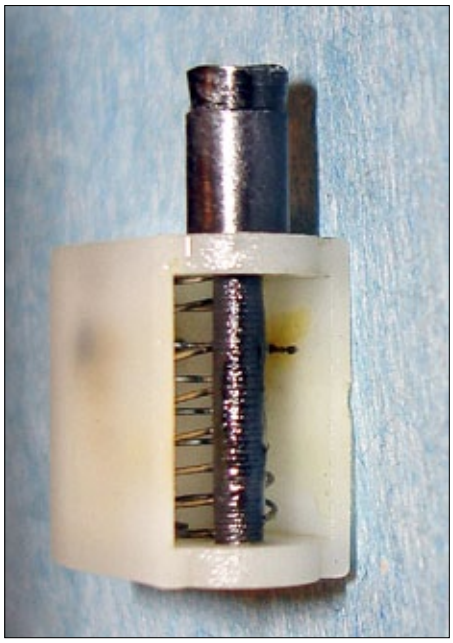
This is a very unusual setup for a sidebar blocker. That round little pin is spring-loaded AND it is motor driven! This intrigued me so much that I just had to take it apart and see what makes it tick. Note: this component is used in both the Early New-Style and Current New-Style locks.

To disassemble, we first lift off the silver protective tube. The motor slides out the bottom, but before it can come all the way out, we need to rotate the driveshaft so that the blocker is in the unlocked position and also to align the driveshaft legs with the cutouts in the plastic. This will become obvious once you do it.

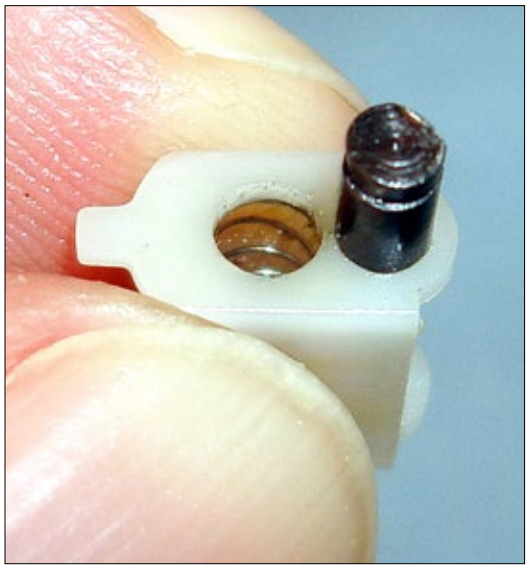
Motor is far enough down to allow the sidebar blocker's plastic housing to be removed from the larger plastic mothership.



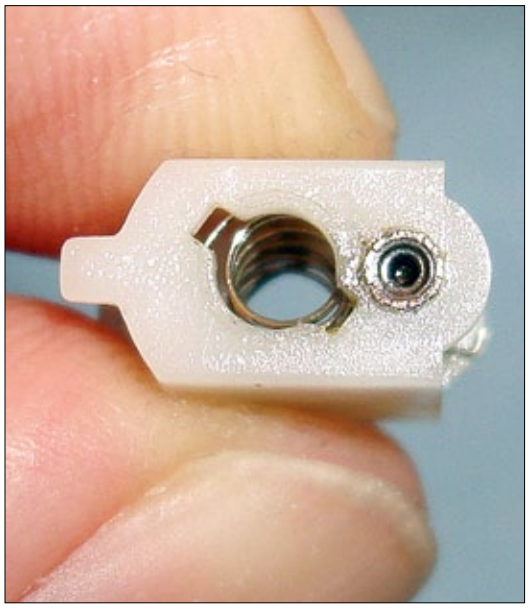
◀ *The components of this most unusual, motor-driven, spring-loaded arrangement.*



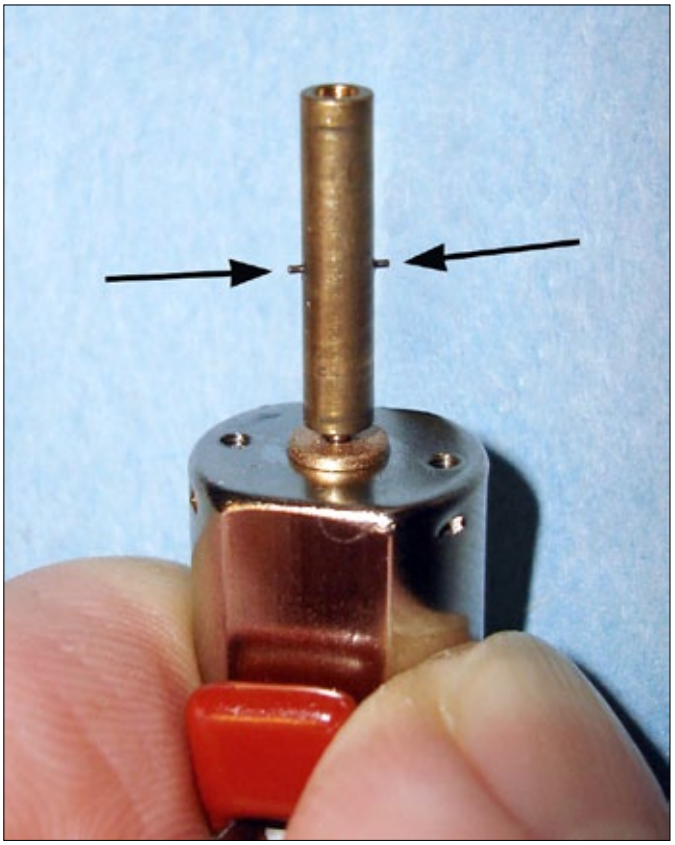
▶ *The spring can be seen behind the round, black, sidebar blocker. When assembled, this spring wraps around the motor's driveshaft.*



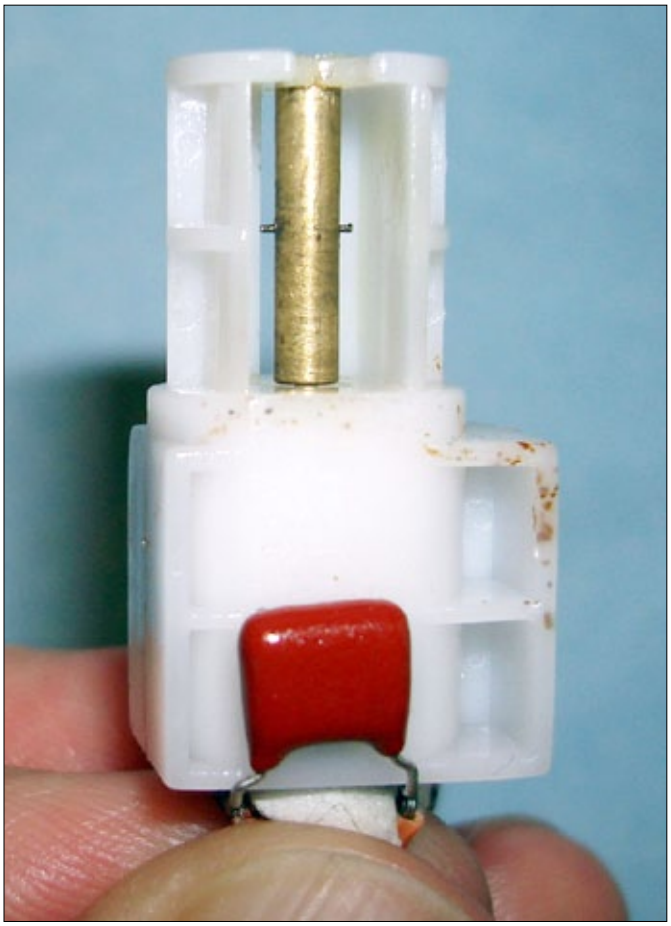
▲ *Looking down.*



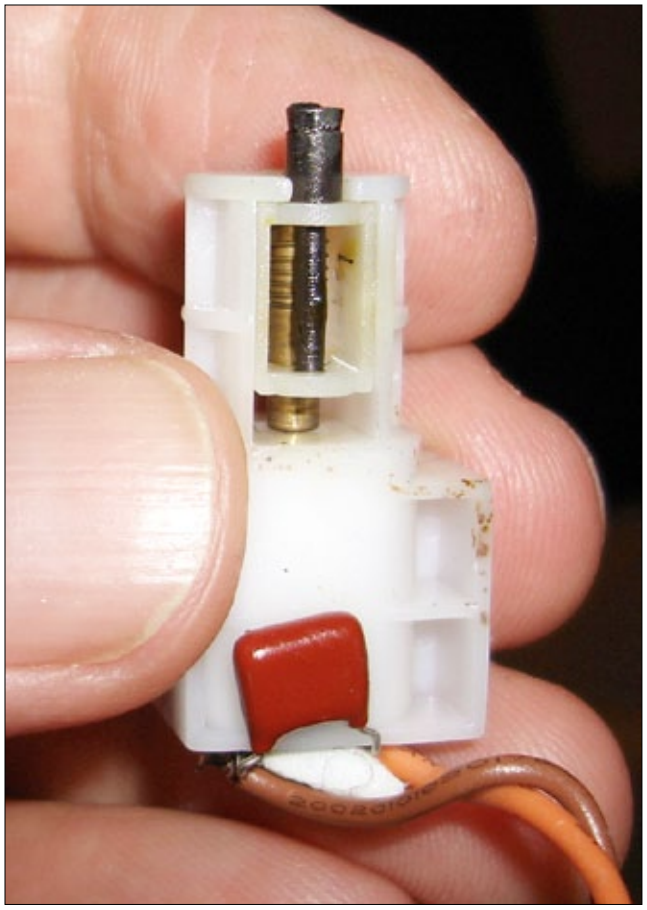
◀ *Driveshaft goes in this side. Notice the cutouts on either side of the hole. These cutouts allow driveshaft pins to clear during insertion.*



The motor and its driveshaft. Two arrows point to the tiny pins on either side of the driveshaft. These tiny pins are what control the sidebar blocker. When the driveshaft spins, the spring's windings spiral up the pins, which compresses the spring and cause the small plastic housing and its sidebar blocker to retract. (The small plastic housing is what we looked at in the three photos along the bottom of the previous page.)



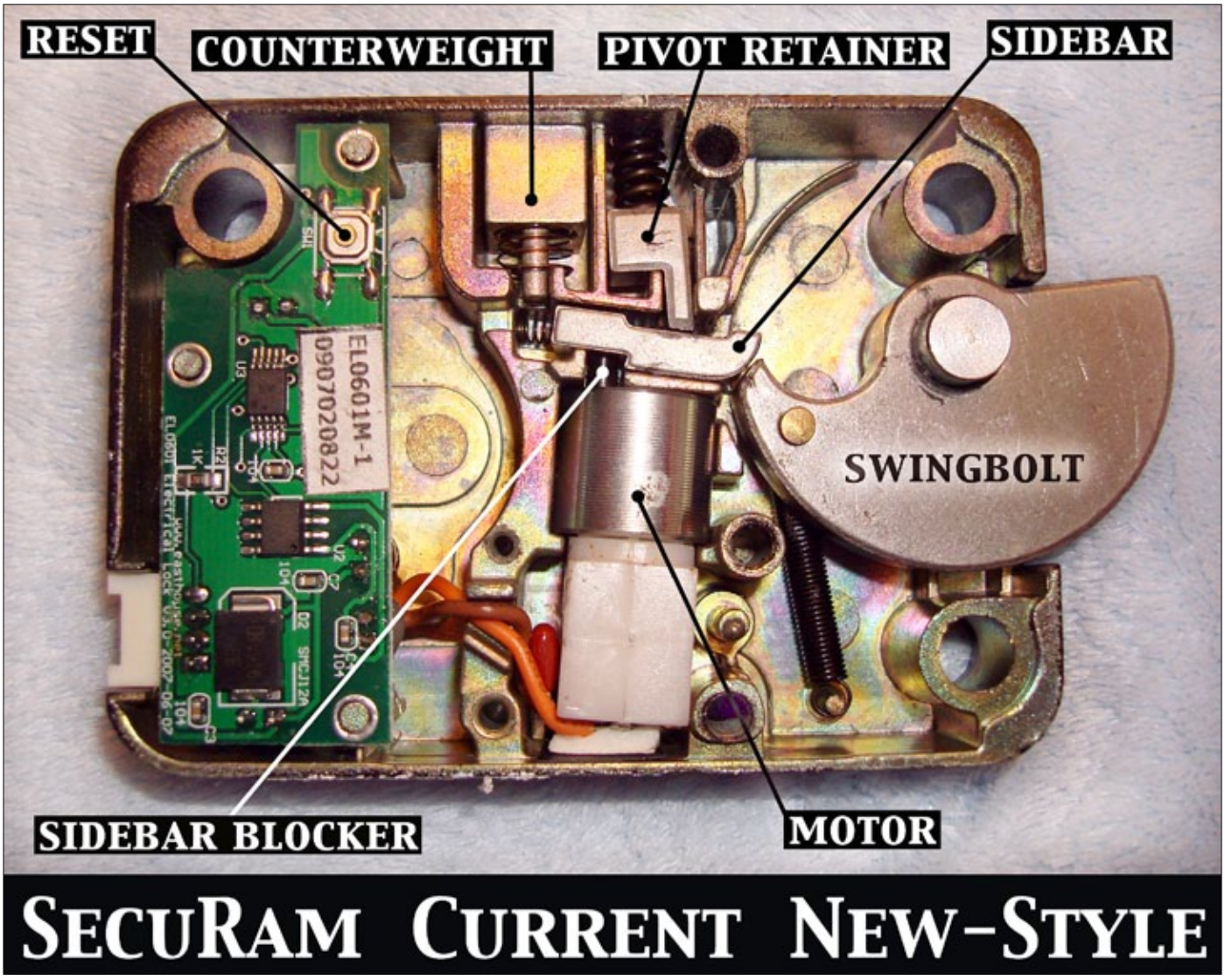
I want to be sure you understand that the pins on the driveshaft just spin. The driveshaft does not move up and down, and neither do its pins. What moves up and down is the small plastic housing (not shown in this photo) which contains the sidebar blocker.



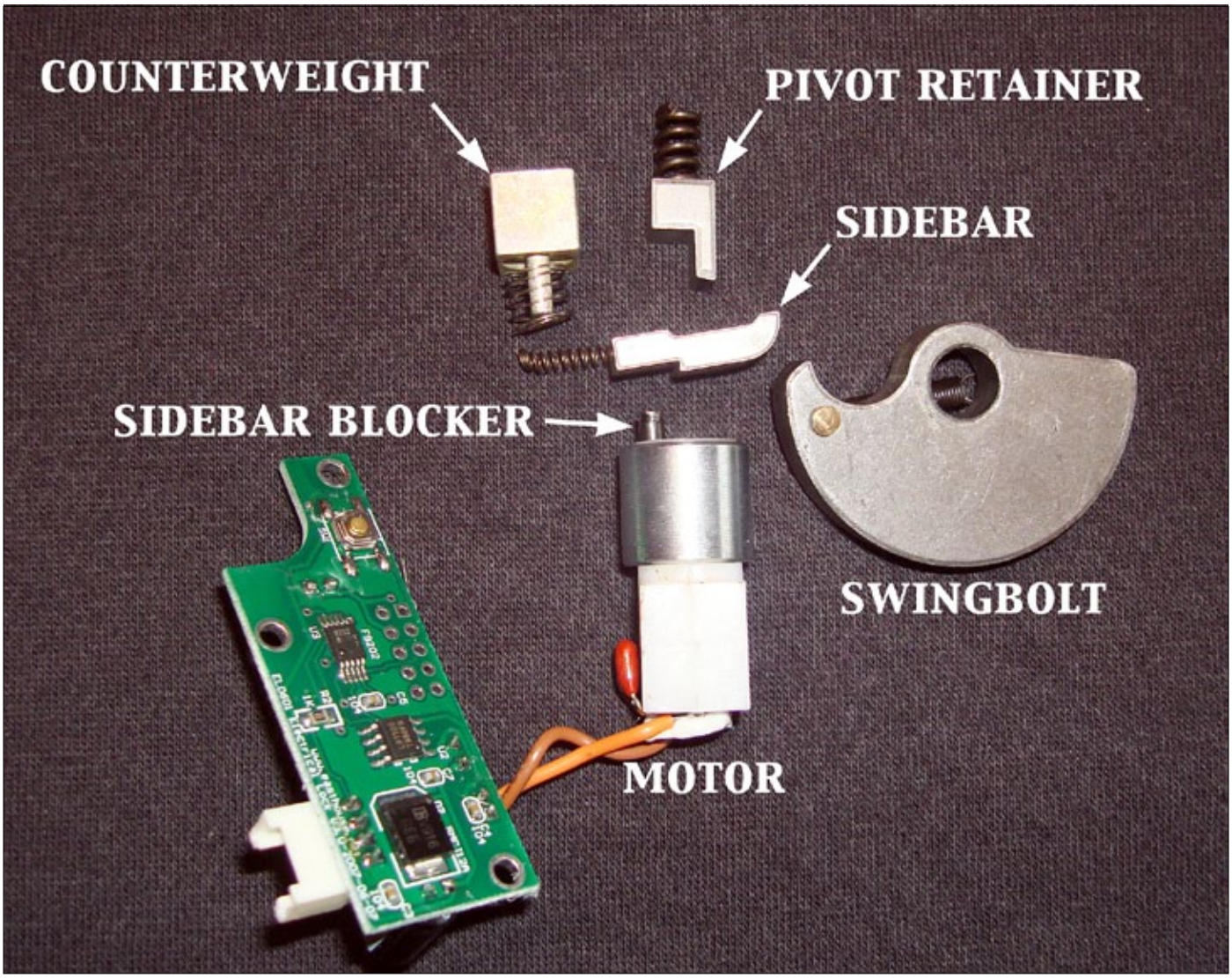
Extended position.

Retracted position. Notice that the little round, black sidebar blocker does NOT move independent of its small housing. They move together as a unit, and are controlled by the tiny little windings on the spring that spiral up and down via the pins on the driveshaft. This is unlike anything I have ever seen.

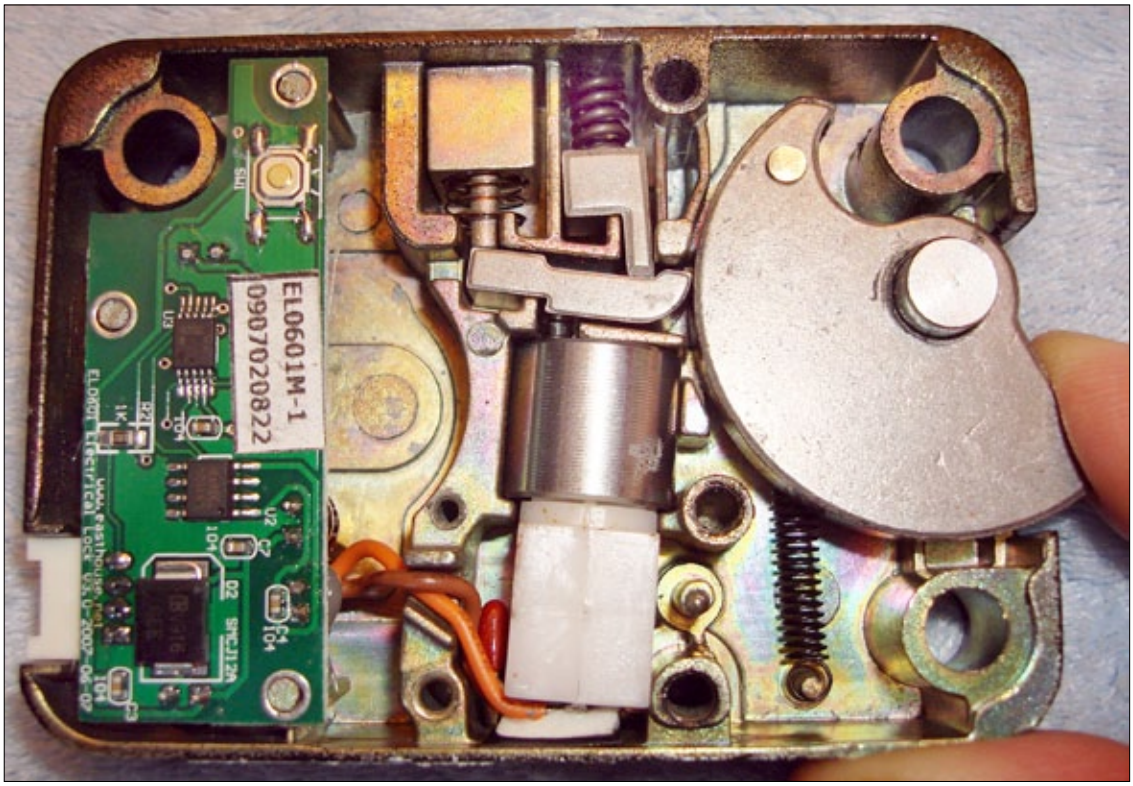
Current New-Style



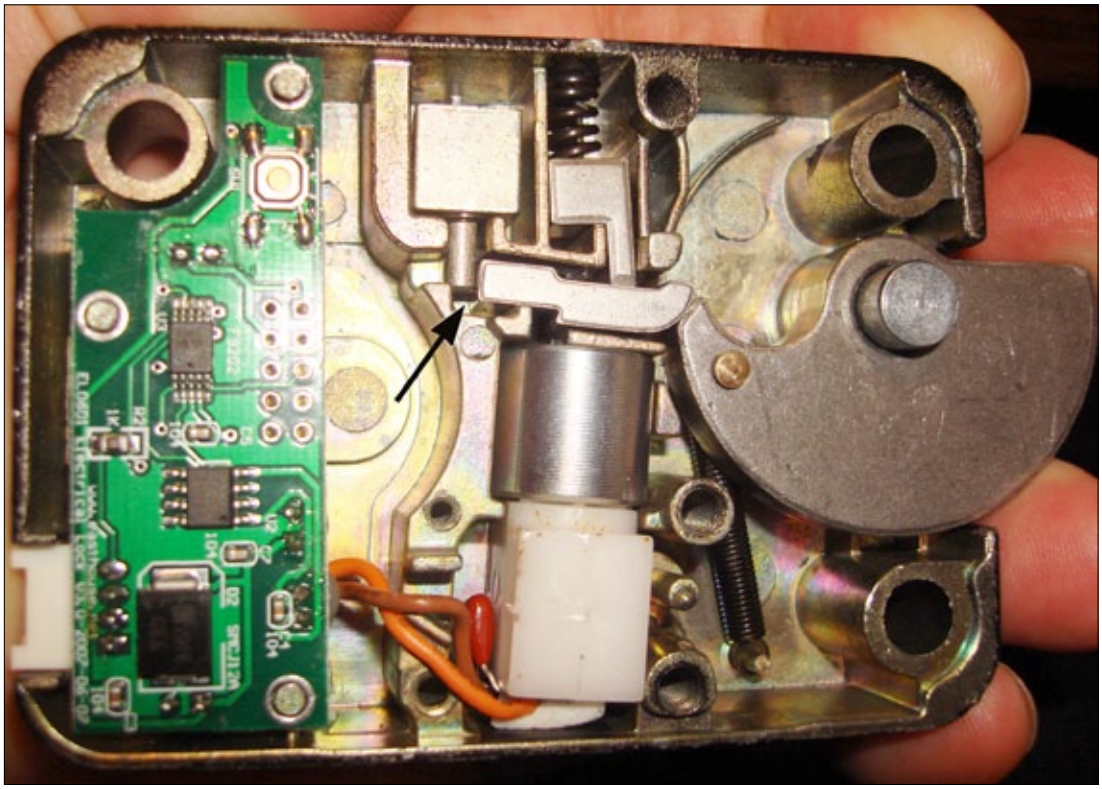
This is the current production model. Notice that the motor and sidebar are a little tilted, compared to the edges of the lockcase. No tube at spindle center on the current production lock. The DP for the sidebar is 1-1/8" toward lockbolt, 1/4" toward the flat side of the lockbolt. The DPs for these two locks are close enough for the same DP to be used: 1-1/8" toward the lockbolt, 1/4" toward the flat side of the lockbolt. MiniRig users: Template 3, Hole O or Hole P, depending on which way the lock is mounted.



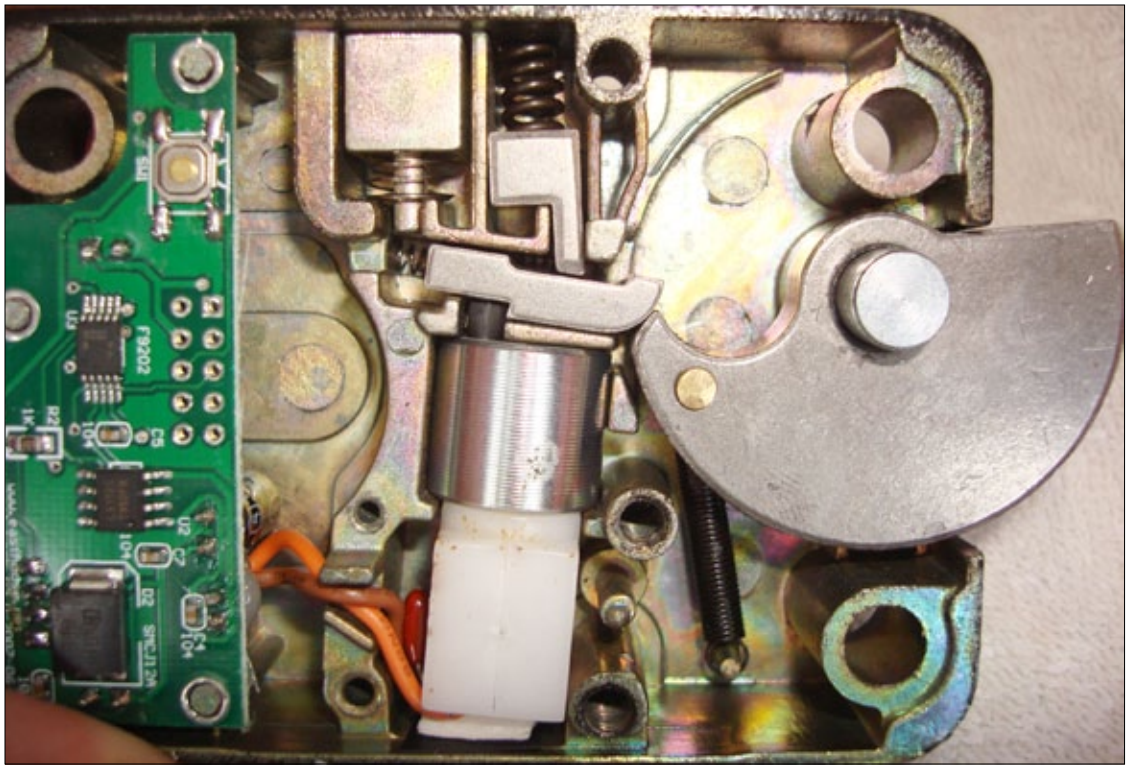
The components spread out, outside the lockcase. There are a lot of springs in this lock. One on the sidebar, one on the pivot retainer, one on the counterweight, one on the swingbolt, and one around the motor's driveshaft. In addition to the canted motor and sidebar, the current production lock also has a counterweight, to thwart some vibration attacks. I believe all the changes from early new-style to current new-style were toward the goal of becoming UL-Listed, which this lock achieved two years ago.



This represents a normal opening, where the operator has entered the correct code, the sidebar blocker has retracted, and the handle has been thrown (simulated in this photo by my finger).

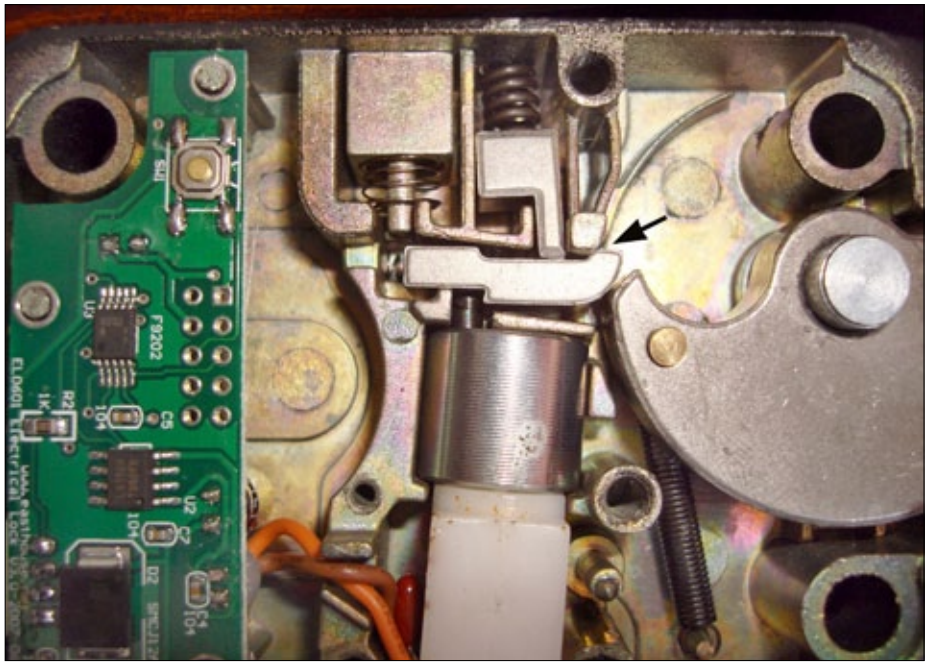


This represents a bouncing attempt on a small safe with RH-mounted lock. Notice that the counterweight has dropped down behind the sidebar and blocks its retraction.



SecuRam in normal locked position with no pressure on swingbolt or sidebar.

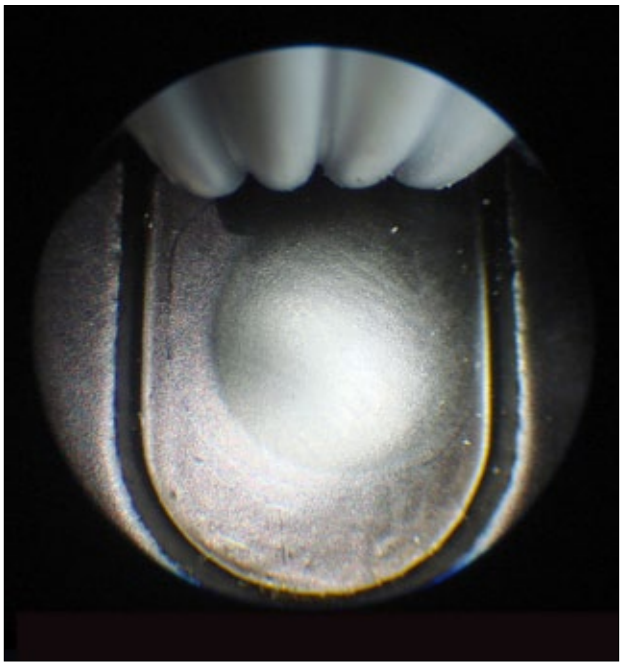
Pivoting pressure was applied to lockbolt, which forced the sidebar up, where it deadlocked against the lockcase. Not as solid as the way a pivot retainer works in a LaGard swingbolt (and not quite as aptly named as the LaGard either, but I am trying to stick with existing, standard terminology, at the risk of perhaps stretching the meaning a bit far). But it does work. Notice, though, that the sidebar does not lock into the case perfectly (see arrow). A little material needs to be removed from inside the sidebar's dogleg for the two surfaces to mate perfectly.



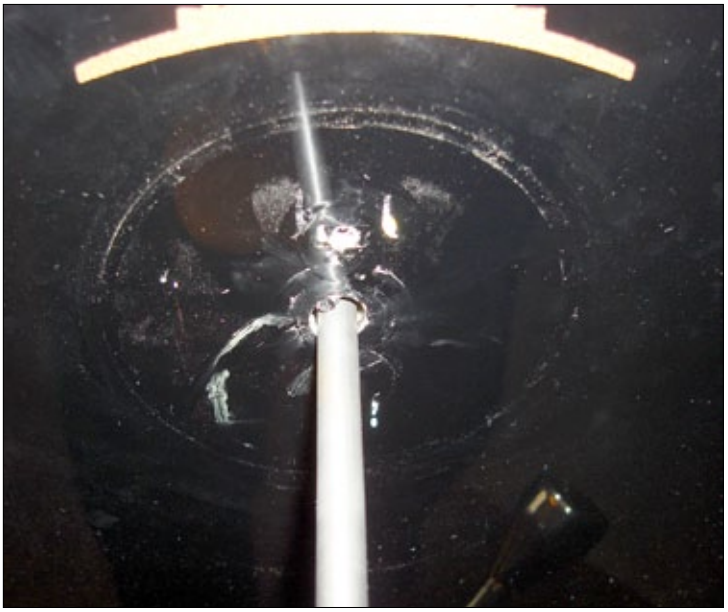
Spindle Hole Attacks: Old-Style

Biometric keypad on a gunsafe. Communication has failed between lock and keypad (no beeps, no lights, no sign of life on Mars).

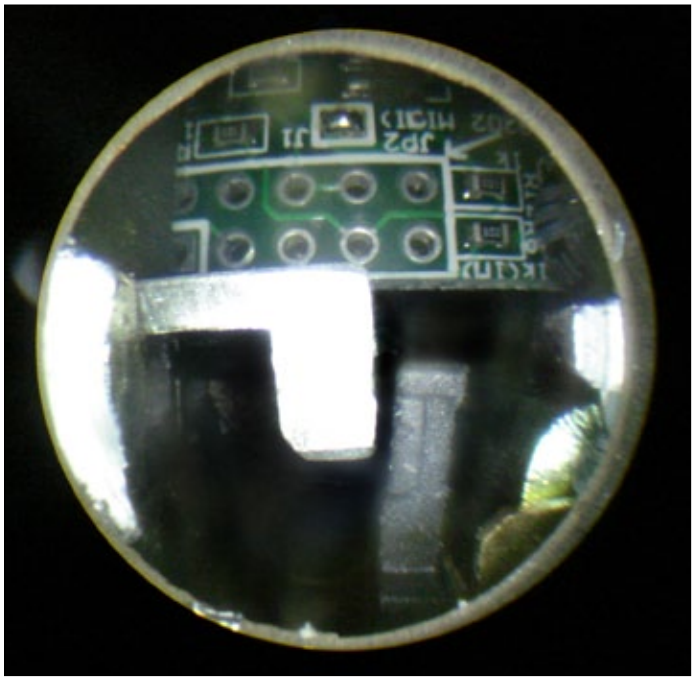
To remove, lift keypad up and away, just like LaGard.



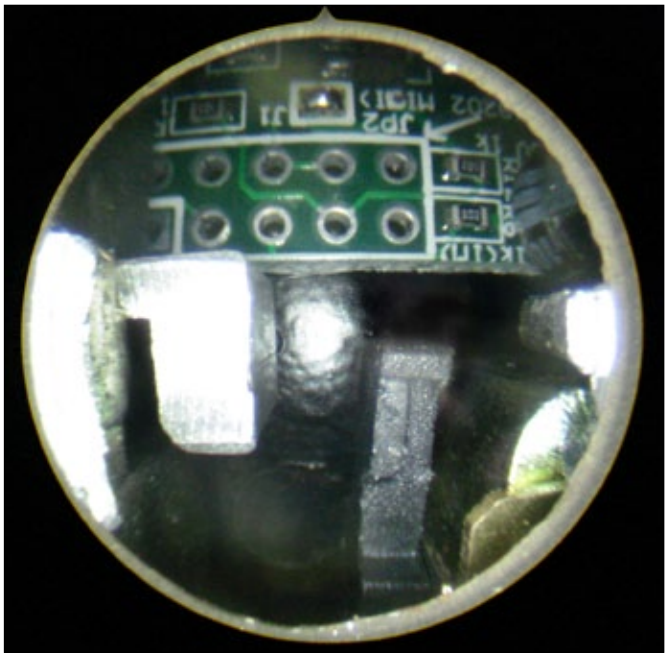
The view through a scope looking down the spindle hole. We see the cable disappearing at the top of the hole, which means the lock is mounted VD.



Using a StrongArm 3/8" Core Cutter to drill through the lockcase — my favorite bit for penetrating the case of just about any e-lock.



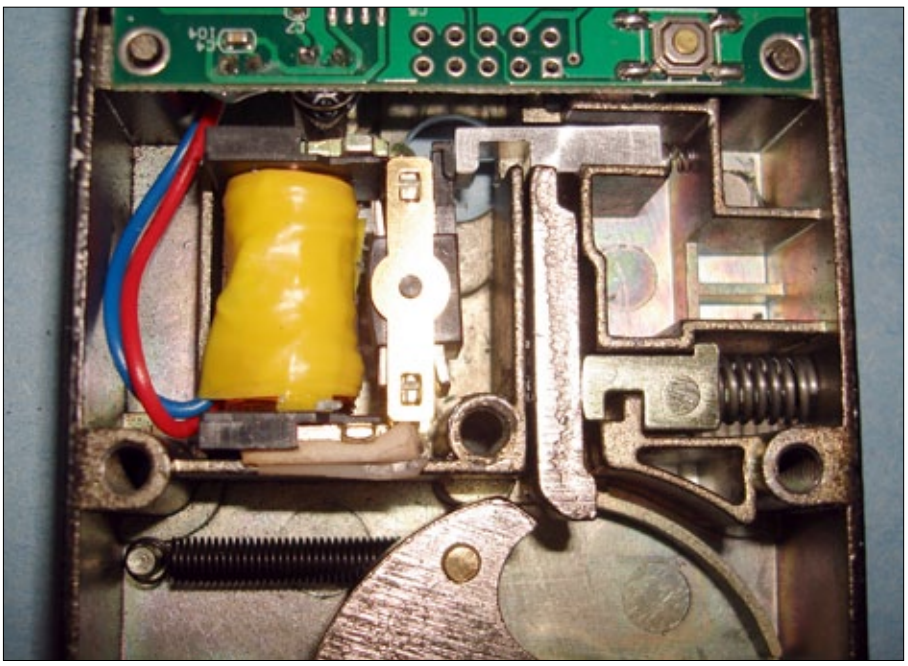
View through the straight-view scope, looking into the hole. In the middle is the end of the sidebar blocker and the black plastic leg from the coil. This is the locked position.



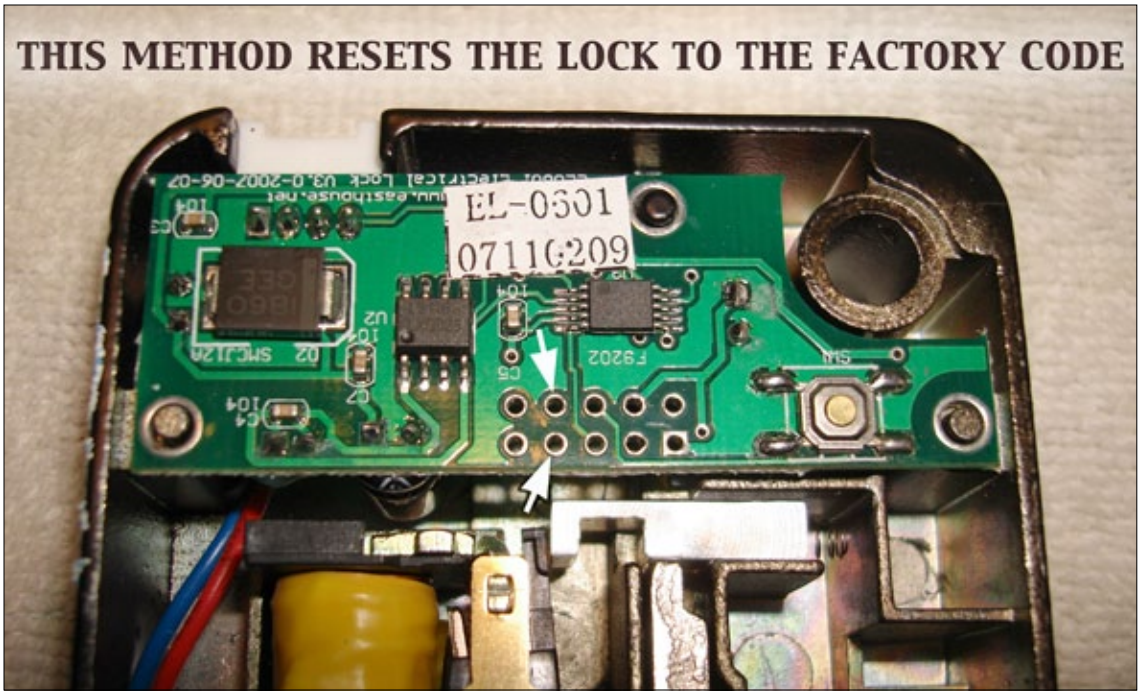
If the sidebar blocker is probed to the left, as I have done in this photo, you have to hold it in this position while you throw the safe's handle. This is because the sidebar is spring-loaded and it will just pop back to the locked position as soon as you let go.

If you probe the black plastic leg over, it will move the sidebar over into the unlocked position, and hold it in position. (The weak sidebar spring cannot overcome the coil.) This is the unlocked position.

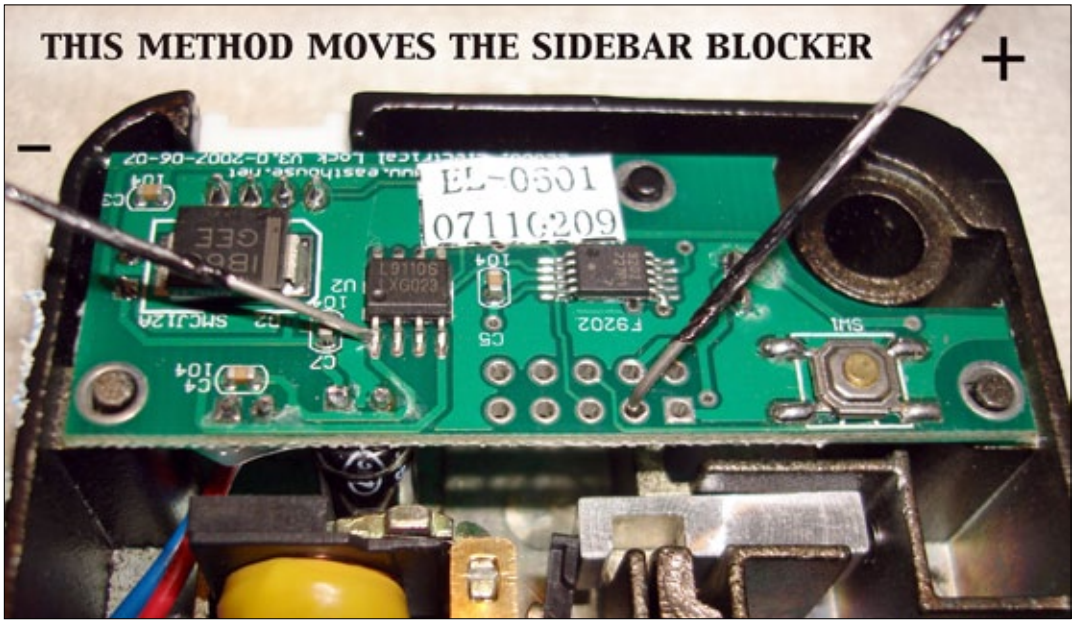
X-Ray view of the lock, showing hole in case.



Sidebar is in locked position. You can see the hole that was drilled through the case.



Earlier I mentioned a spiking reset by Mike Yarberry. It is a doozie: Keep keypad cable connected. Penetrate lockcase and STOP (do not damage circuit board!) Place probe wire in hole pointed to by the lower white arrow. Tap probe wire against negative side of keypad's battery, and remove probe wire. Next, insert probe wire in hole pointed to by upper white arrow. Tap probe wire repeatedly to negative side of keypad's battery until you hear a double beep. The double beep confirms that the lock has been reset to the factory code of 1-2-3-4-5-6 or 1-1-1-1-1-1.



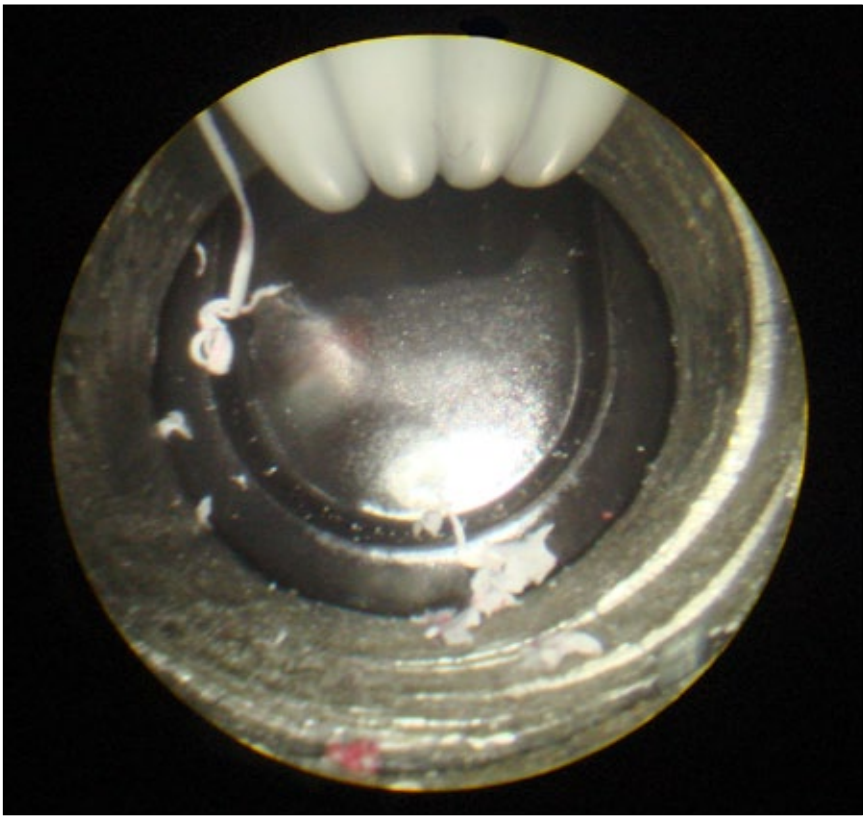
Mike Griffin brought several spiking points to my attention. These points activate the magnetic coil and actually move the sidebar blocker into position. The upside is: this spiking method does not require the keypad to be attached. The downside is that once I spiked this lock open on my bench, it was dead and would not spike again. On the new-style locks, however, I have spiked them over and over again. In the field, I do not recommend the reset and spiking methods on old-style SecuRam. Manually probing the sidebar blocker into position is the way to go on old-style locks. Not so, though, on new-style locks, as we are about to see.

Spindle Hole Attacks: New-Style

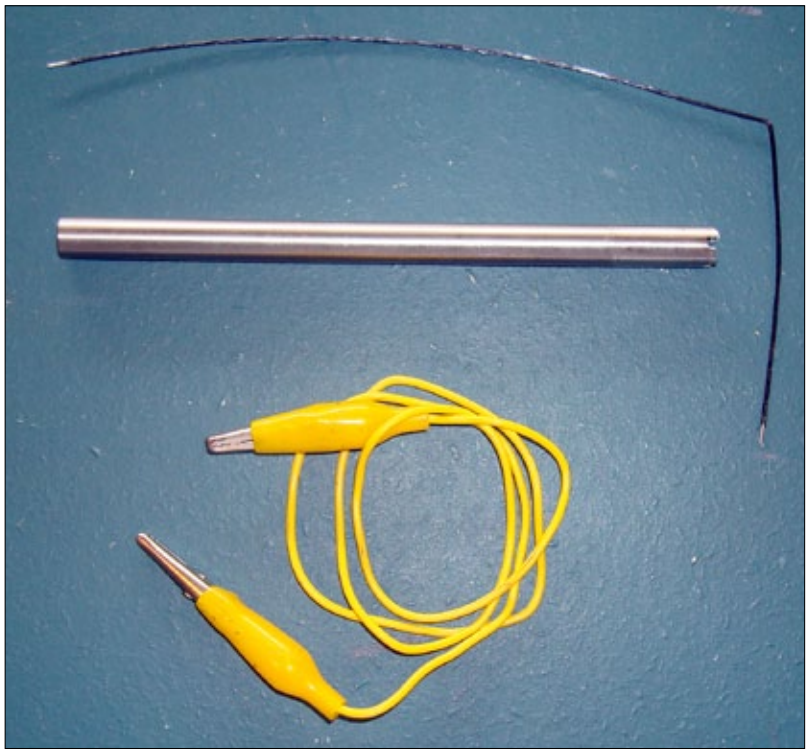
I owe Mike Yarberry bigtime for this spiking reset. He emailed it to me a couple of years ago, and I finally had the chance to use it. In this photo we see the handle and SecuRam keypad on a gun safe.

Close-up of alphanumeric keypad.

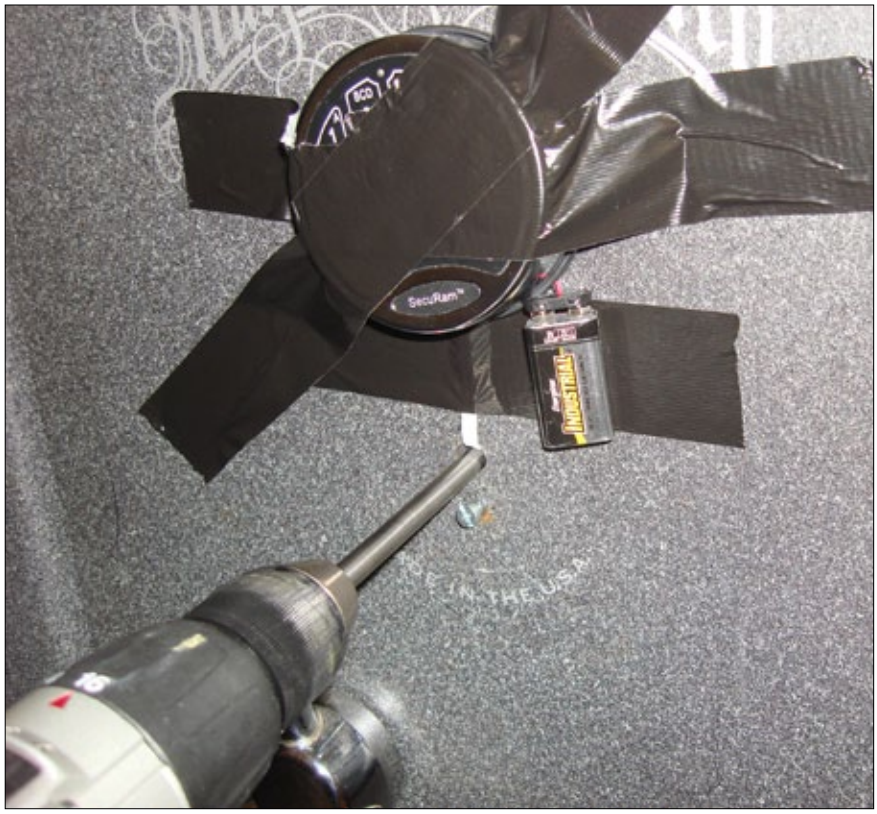
First step is to remove keypad. It lifts up and away, just like LaGard.



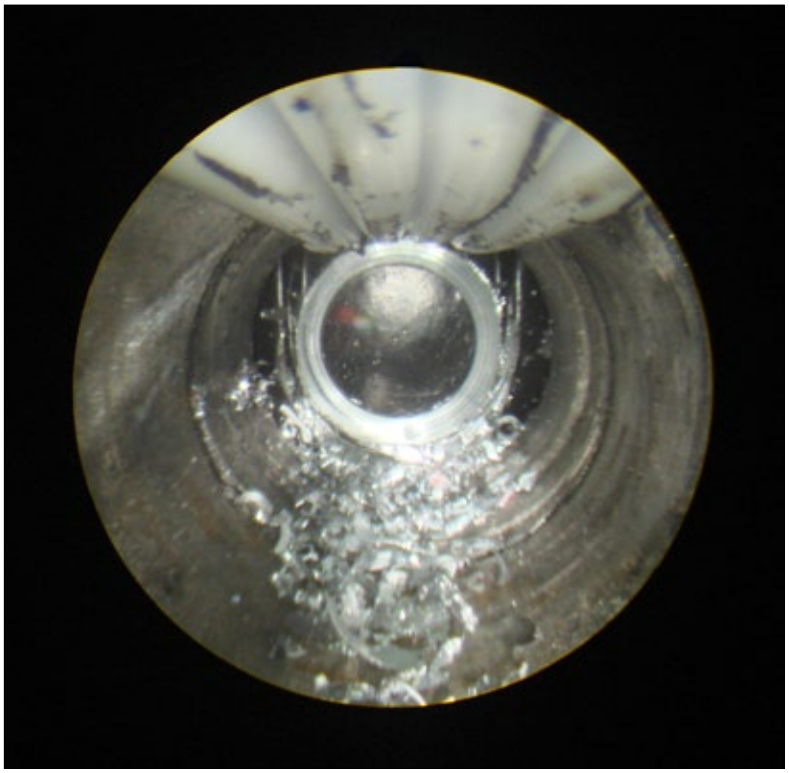
The view through a scope looking down the spindle hole. We see the cable disappearing at the top of the hole, which means the lock is mounted VD.



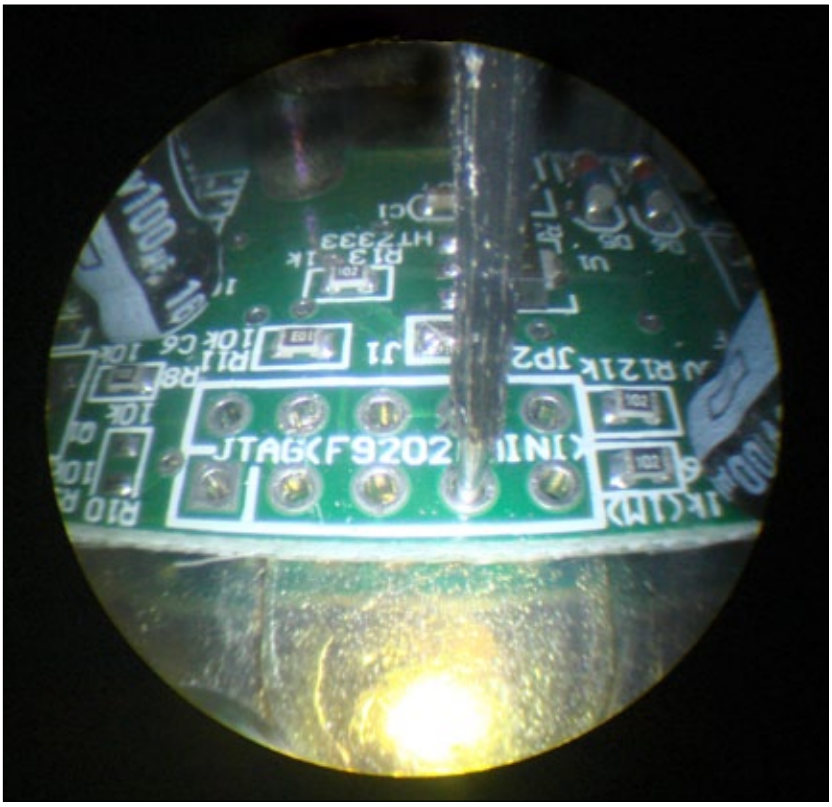
Tools needed to perform this spiking reset: StrongArm 5/16" or 3/8" Core Cutter (use the biggest one that will fit down the spindle hole), some wire, and alligator clips.



Using a StrongArm 3/8" Core Cutter to drill through the lockcase. I have duct-taped the keypad above the spindle hole. The cable is intact and the battery is dangling from its connector, outside the keypad. (This is necessary because we are going to connect our probe wire to the negative terminal in just a minute.) Using a Core Cutter is the most efficient way to minimize the chance of damage to the cable. The only serious alternative is to use an end mill in a tube. I prefer the simpler method.

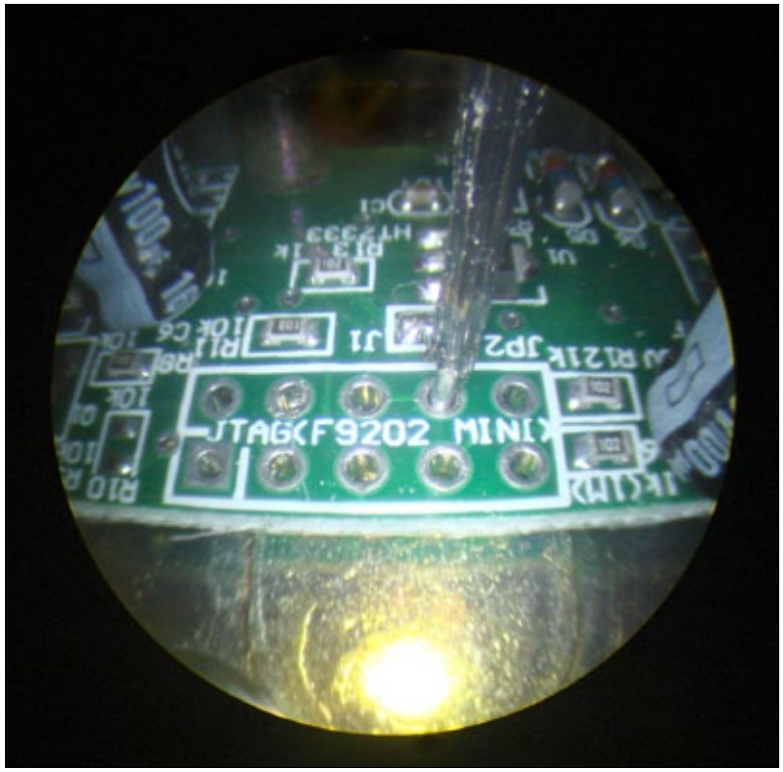


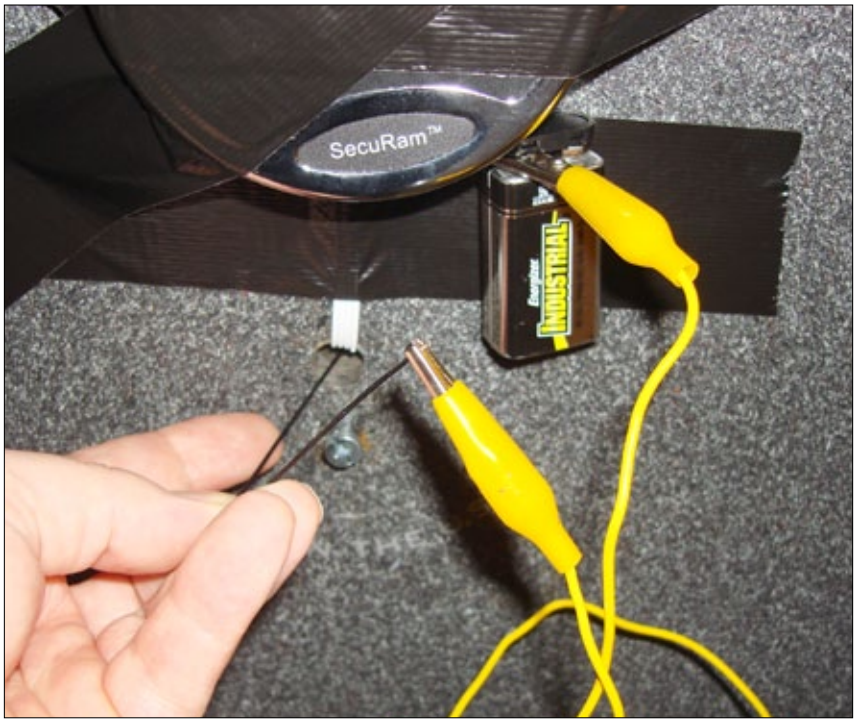
View down the spindle hole, showing the hole drilled about halfway through the lockcase. Note: on a VD-mounted lock, we don't have the same worry about damaging the circuit board as we do when the lock is mounted VU (assuming a right-hinged safe door). The only way we are going to damage it is if we blast into the lock, which we are not going to do! Different story on a VU lock, because the other side of the lock is against the safe door, which puts the circuit board very close to our drill bit when it penetrates the lockcase.



View down the scope, looking down the drilled hole at the circuit board. Our probe is in the hole second from right, lower row. All we do here is basically touch our probe to the alligator clip for about half a second and remove. This is usually (but not always) accompanied by a single beep.

The next step is to move our probe up to the top row, still second from right (as viewed in this photo, which is of a VD lock on a right-hinged safe door). What we do here is tap our probe repeatedly to the alligator clip until we hear a double beep. It took about a dozen taps on this one before I heard the double beep. The double beep indicates that the lock has been reset to the factory default code, which is either 1-1-1-1-1-1 or 1-2-3-4-5-6. I entered 1-1-1-1-1-1, heard the motor run, and threw the handle – the safe was open.

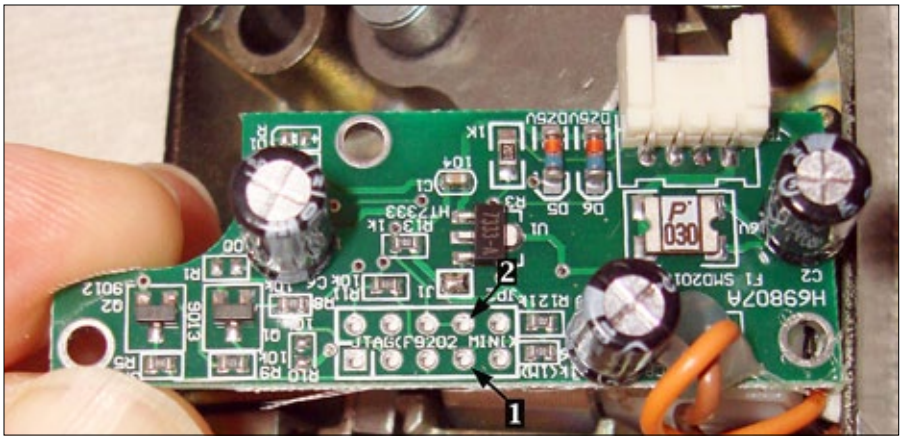




This photo kinda sorta shows how to do it. Notice that one end of the alligator clip is connected to the 9v battery, and that the battery is still connected to the keypad, whose cable is still connected to the lock. Normally, you would hold the wire in one hand and the alligator clip in the other, and tap them together for less than a half second with each tap. But since I was by myself and needed one hand on the camera, I couldn't show the wire tapping against the alligator clip, and instead had to connect them. DO NOT CONNECT THEM! You want to tap, not connect. Think momentary, not continuous.

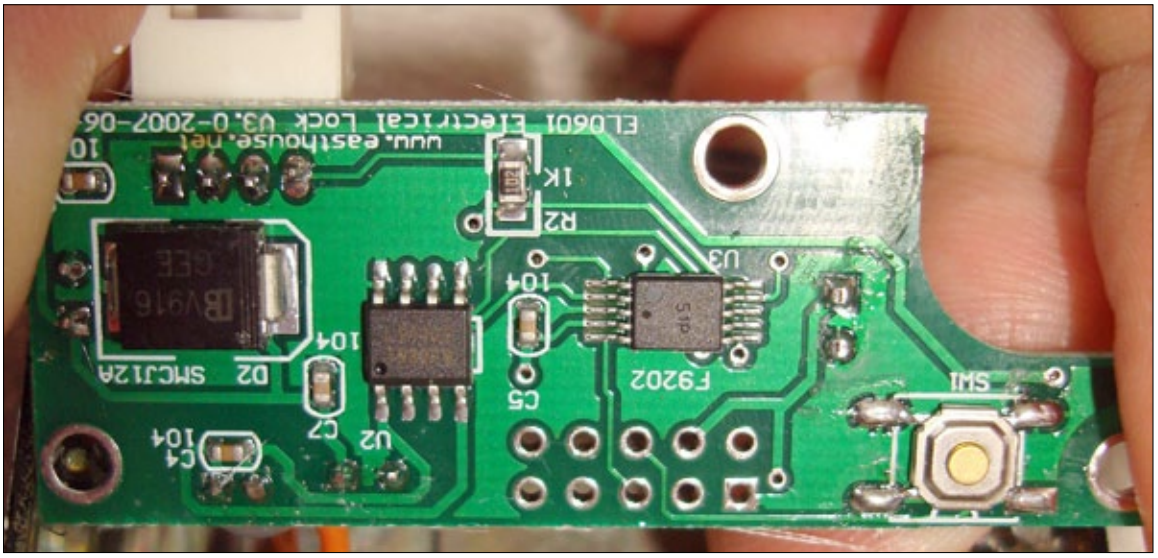
A look at the lock. This is an x-ray view, showing the side of the lock that was against the door. The hole in the case can be seen. Arrow points to lower hole – the one we spiked once and momentarily, before moving to the upper hole (not visible in this photo, but easily accessed using a wire and a scope).

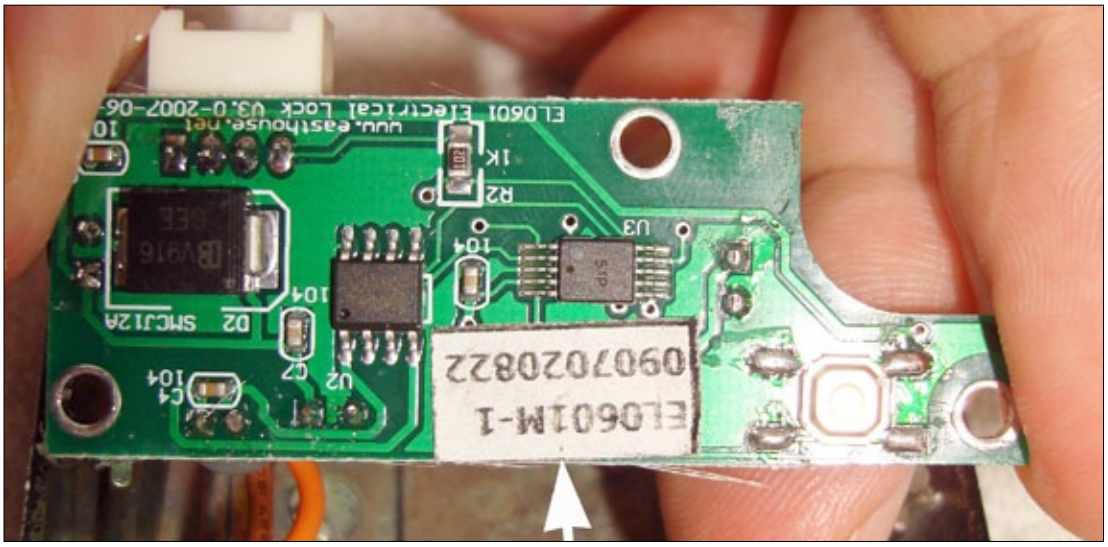
Lock was flipped over and the back cover removed. Arrows point to the two spiking reset points on the circuit board. From our perspective when opening the safe, these two points were second from the right. In this photo, though, they are second from the left. That is because we are looking at the other side of the circuit board. See the hole at spindle center that we drilled? We penetrated the other side of this lockcase. Had we penetrated this side, we would have had to take extra care not to damage with circuit board with the Core Cutter.



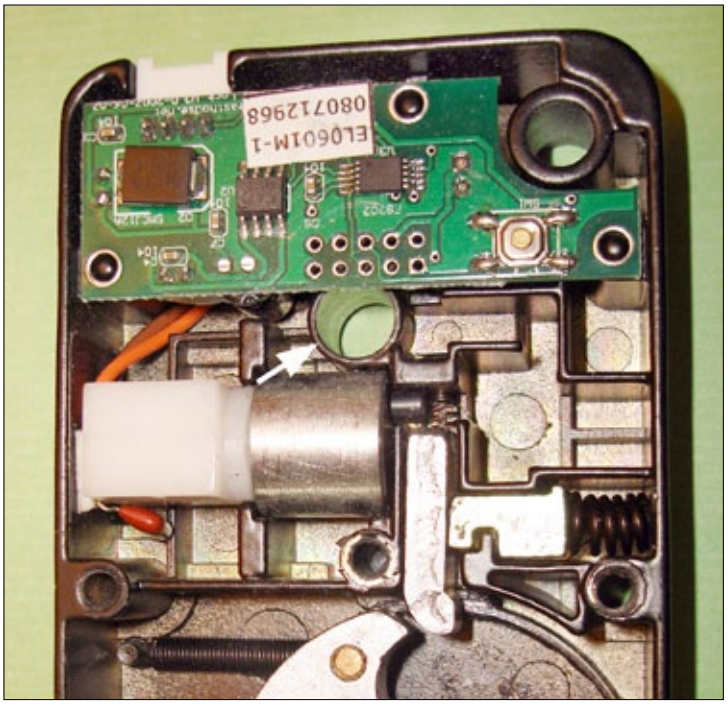
◀ *Circuit board removed and flipped over, showing the side we could see through the drilled hole. The two black arrows point to the spiking reset points. Use (1) first, and tap one time. Use (2) next, and tap repatedly until you hear the double beep confirming the reset (to either 1-1-1-1-1-1 or 1-2-3-4-5-6).*

▶ *One more thing to look for. Sometimes you will see an unblemished circuit board like this ...*

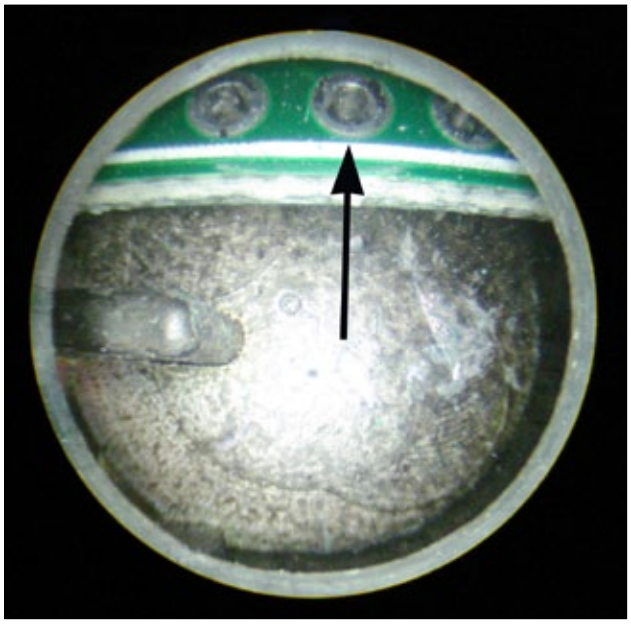




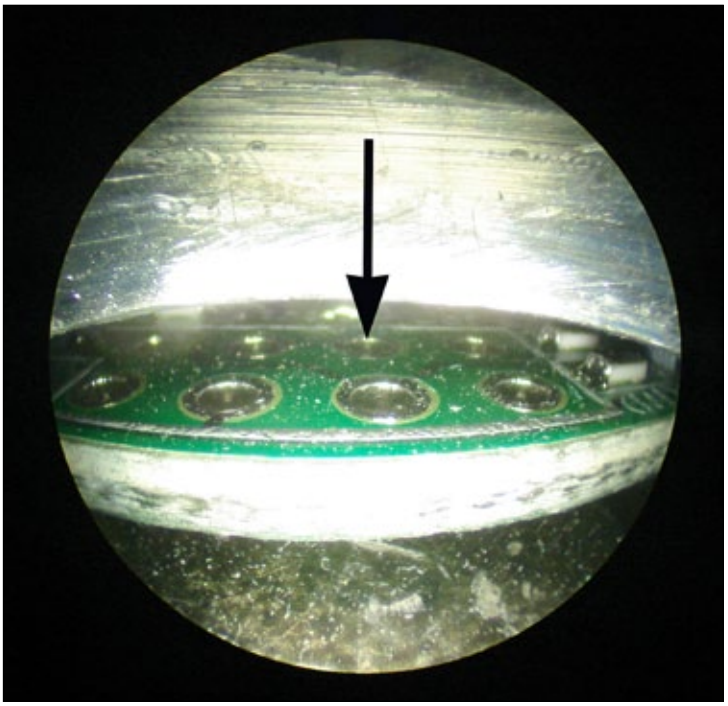
◀ *... and sometimes you will see a pesky little tag like this covering your spiking reset points. Grrr!!! Stay calm, sharpen your probe tip to a nice point, and gently poke through the tag.*



The one I spiked was a current production lock. But I want to look at the early new-style lock, to show you the difference. On a VU lock on a right-hinged door, there would be no difference, but on a VD-lock on a right-hinged door, you will have to deal with the tube (see arrow).

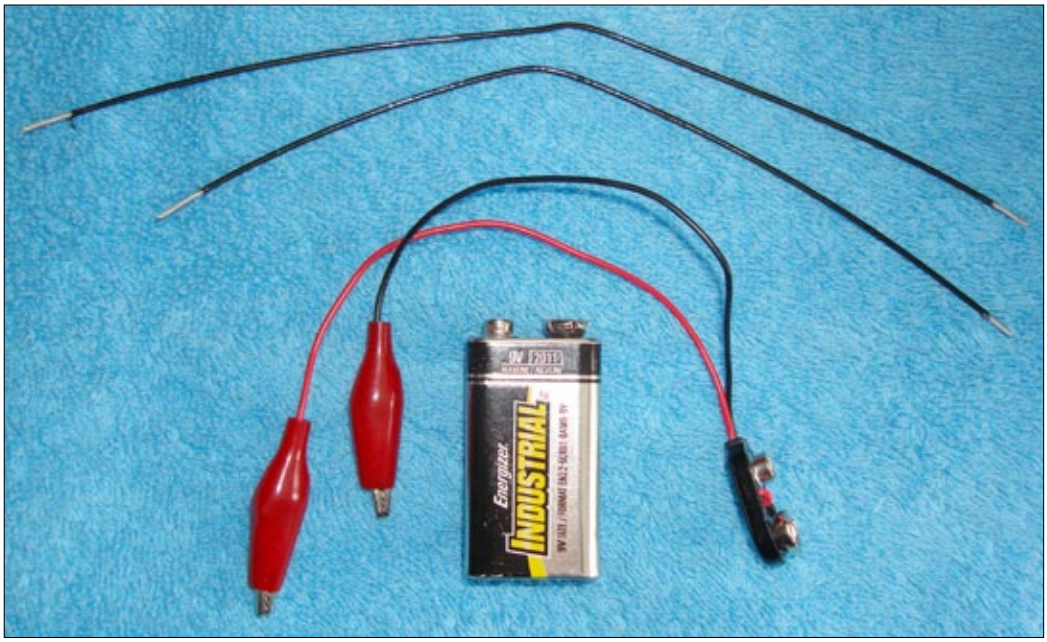


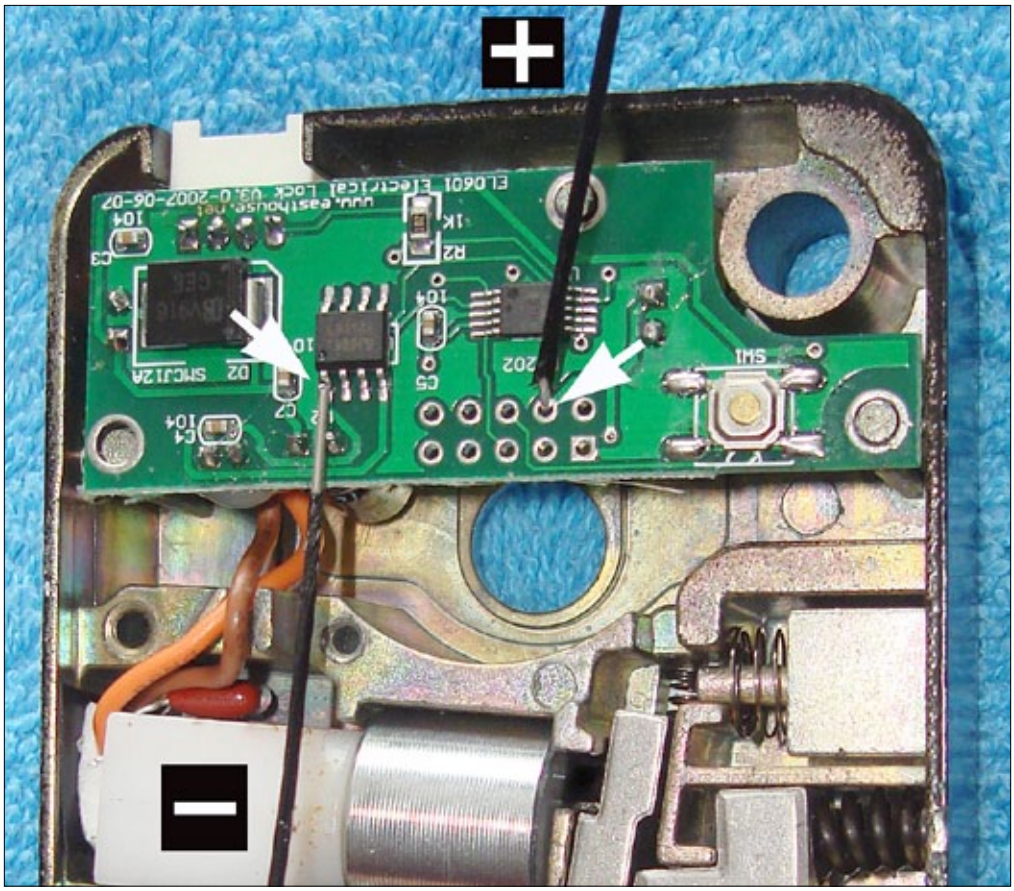
View down the straight-view scope. Our first spiking reset point is accessible straight down the hole (see arrow). The tube prevents us from directly seeing the second.



The tube blocks direct access to our second spiking point. So we use a bent wire and a right-angle scope. Remember to use tap-tap-tap, not continuous contact.

What if the cable to the lock is messed up and you cannot use it to complete your circuit … is spiking hopeless? No! Mike Griffin brought a few spiking points to my attention. These are not for resetting the code, but for spinning the motor and opening the lock. The tools necessary are simple: 9v battery, connector, two wires.



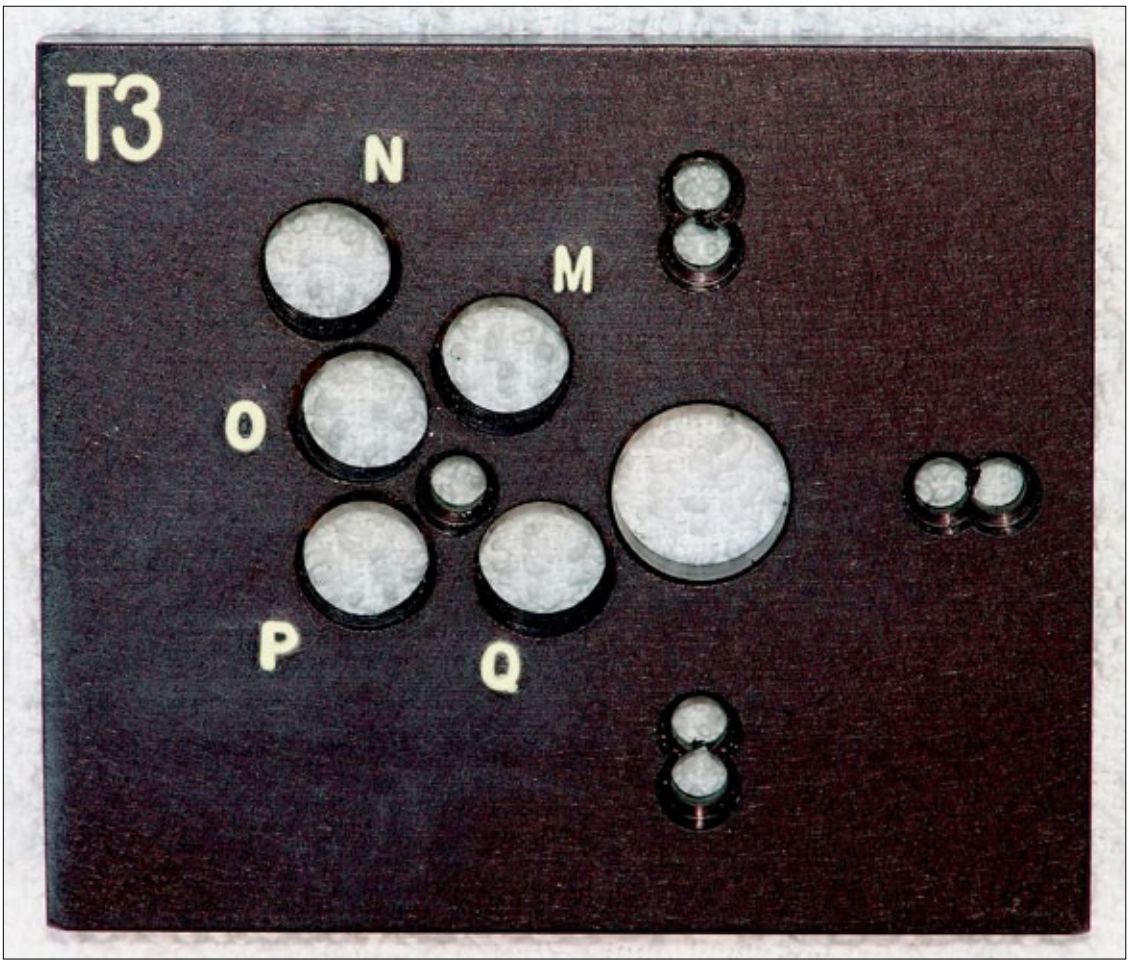


There are several spiking points on the board that activate the motor, but these two points are probably the most practical. Warning: use this spiking tip only as a last resort, as it may fry the lock. But if your only alternative is drilling, this is definitely worth a try before drilling the door.

Drilling the Sidebar

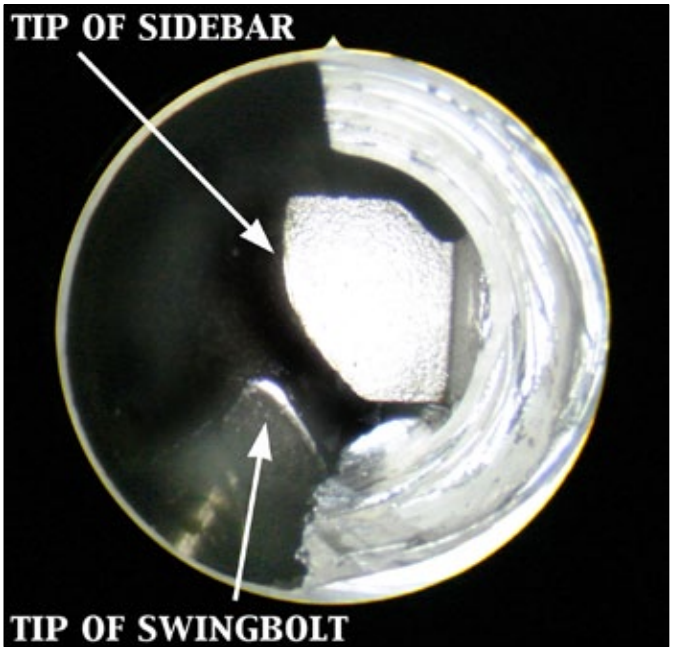
If the various spindle hole attacks fail, you may have to drill through the door. One possible target is the sidebar blocker, but this will result in three different drill points, depending on which version of the lock you are dealing with. A simpler target is the sidebar itself. This has two advantages: all three locks have the same DP for the sidebar, and there is an existing MiniRig Template and Hole that covers this DP.

DP = Drill Point

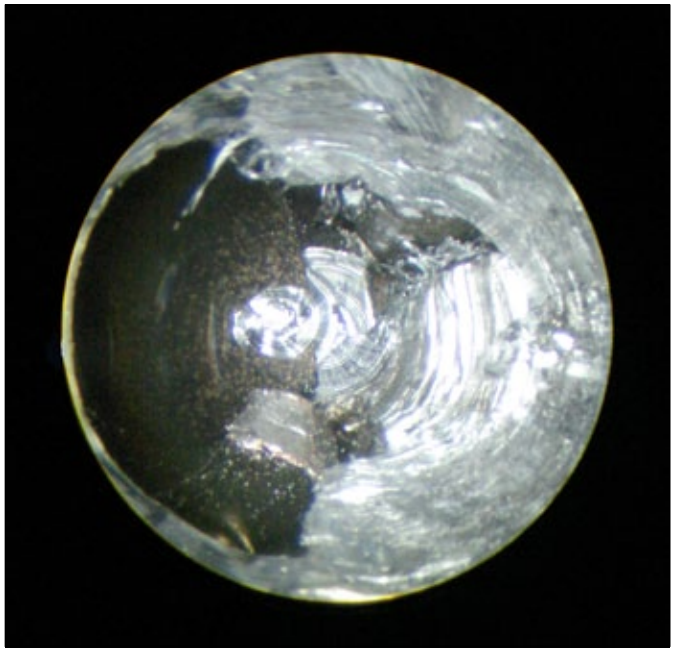


If you need to drill a SecuRam, you can use your MiniRig with Template 3, Hole O or P. These DPs are for the LaGard swingbolt locks, but they work equally well on the SecuRam. And the process for determining whether to use Hole O or Hole P is the same for SecuRam as it is for LaGard. Once you know which direction the lockbolt is pointing (VU, VD, RH or LH), the next question is: which side of the lock bolt is flat? The flat side of the lockbolt will be on one side, and the half-moon shaped side on the other. Always pick the hole on the flat side. Tip: On Swingbolt locks mounted VU or VD, the flat points toward the opening side of the door. Always.

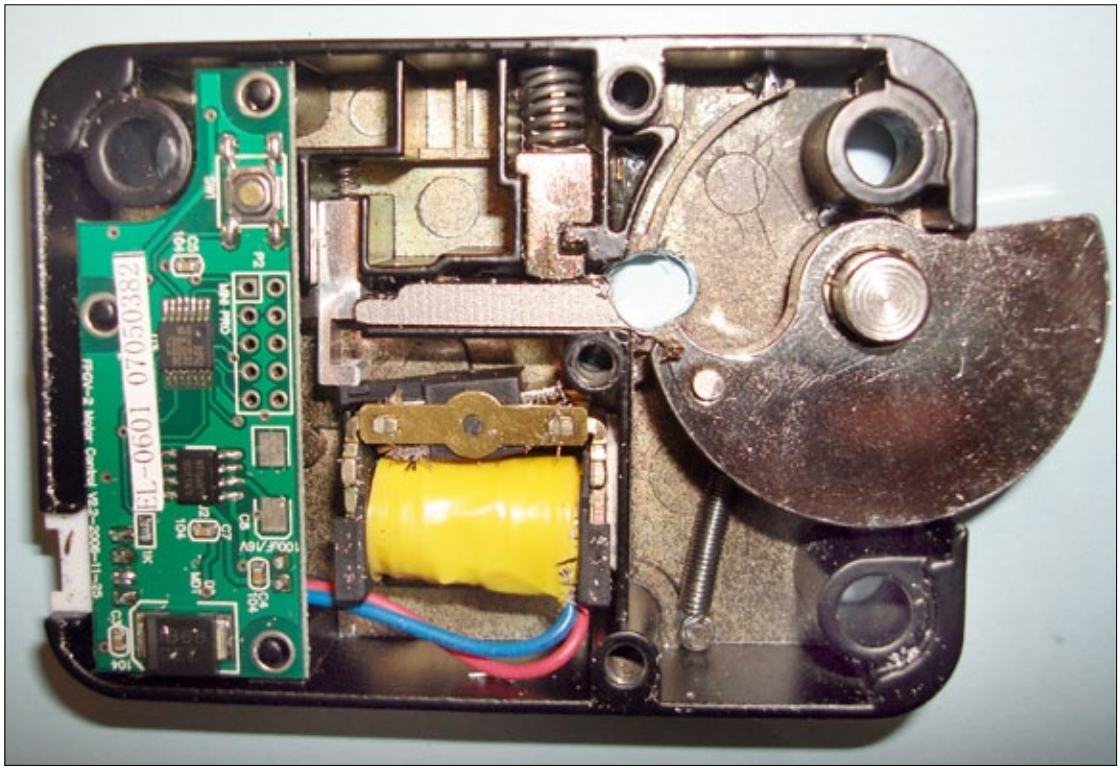
Old-Style



View through scope, showing tip of sidebar and tip of swingbolt, before drilling.

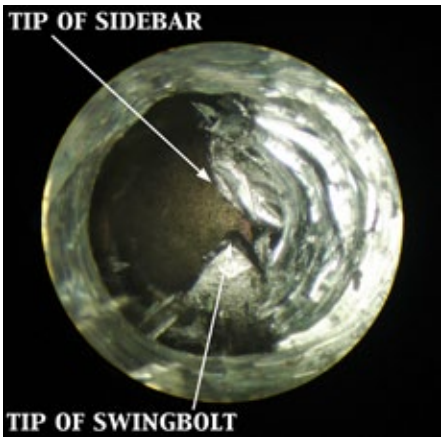


View through scope, showing tip of swingbolt drilled off. The handle can now be thrown, and the sidebar will swing right by the shortened (drilled) sidebar.

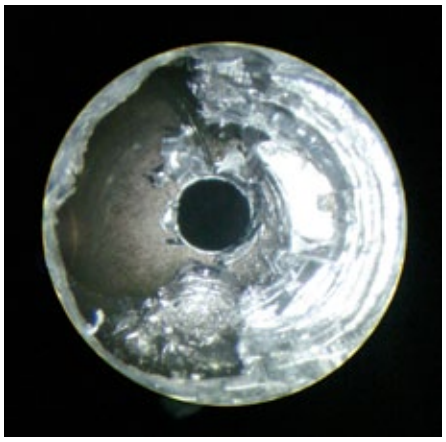


Trophy shot, produced with MiniRig Template 3, Hole O (RH mount, with flat on top side of lockbolt).

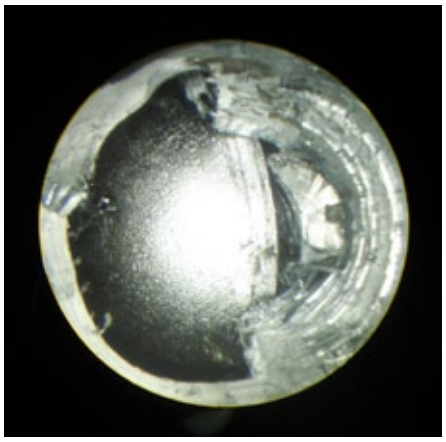
Early New-Style



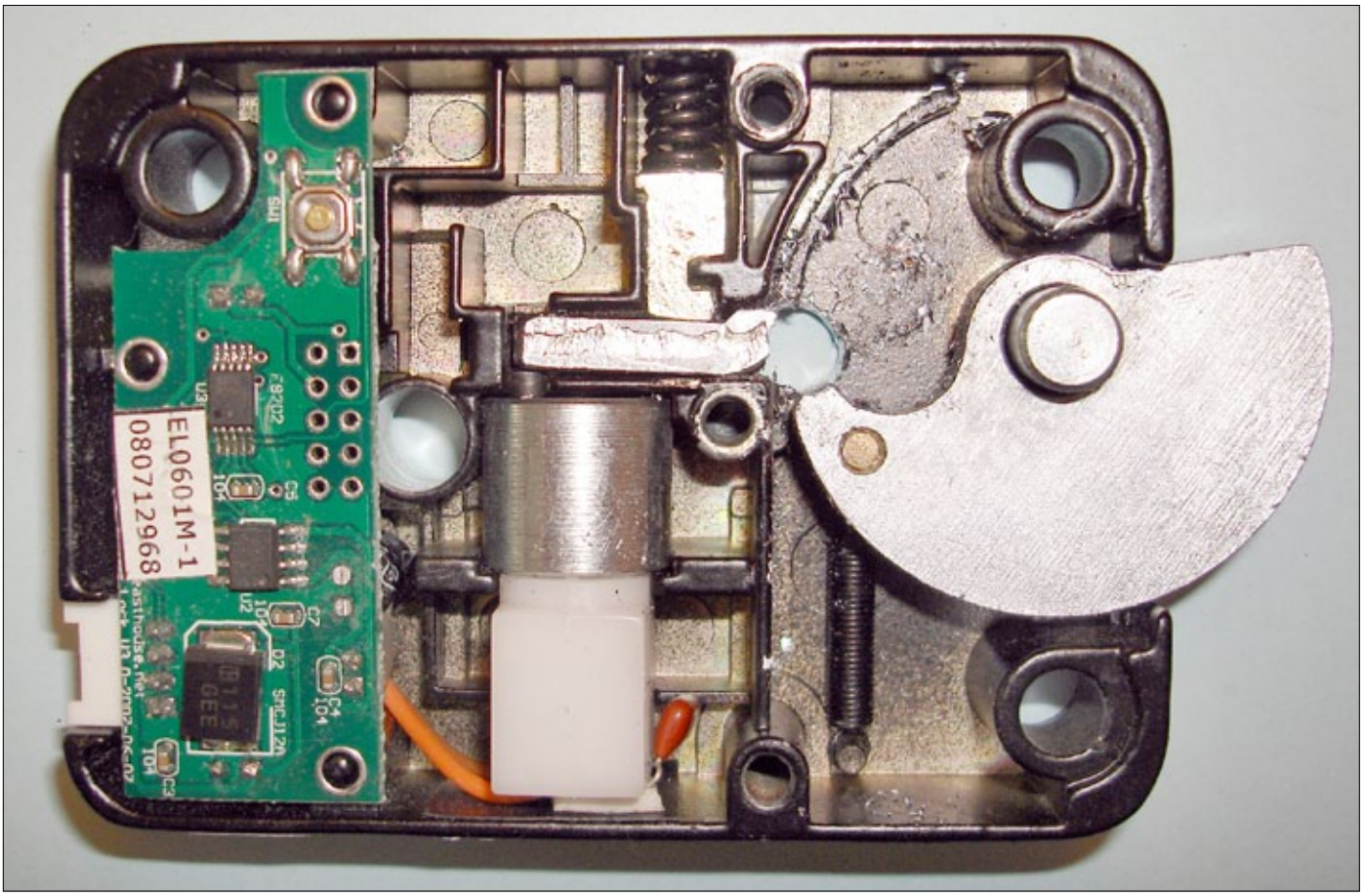
View through scope, showing tip of sidebar and tip of swingbolt, before drilling.



View through scope, showing tip of sidebar drilled off.

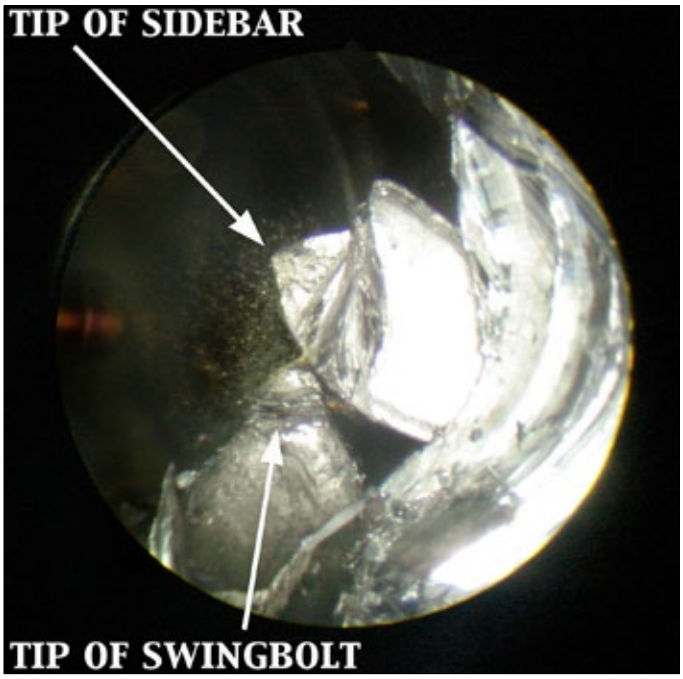


View through scope, showing swingbolt retracted.

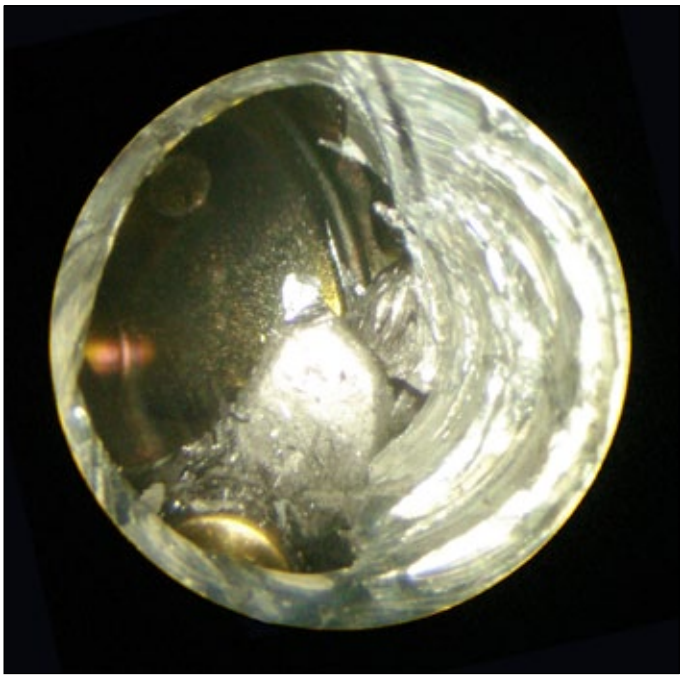


Trophy shot, produced with MiniRig Template 3, Hole O (RH mount, with flat on top side of lockbolt). Notice that the sidebar was not drilled. Vibration from the drill motor retracted the blocker!

Current New-Style



View through scope, showing tip of sidebar and tip of swingbolt, partially drilled off (my bit ticked the sidebar before I could snap the photo).



View through scope, showing tip of sidebar almost completely drilled off.

Trophy shot, produced with MiniRig Template 3, Hole O (RH mount, with flat on top side of lockbolt).

I.D. ME (IF YOU CAN)

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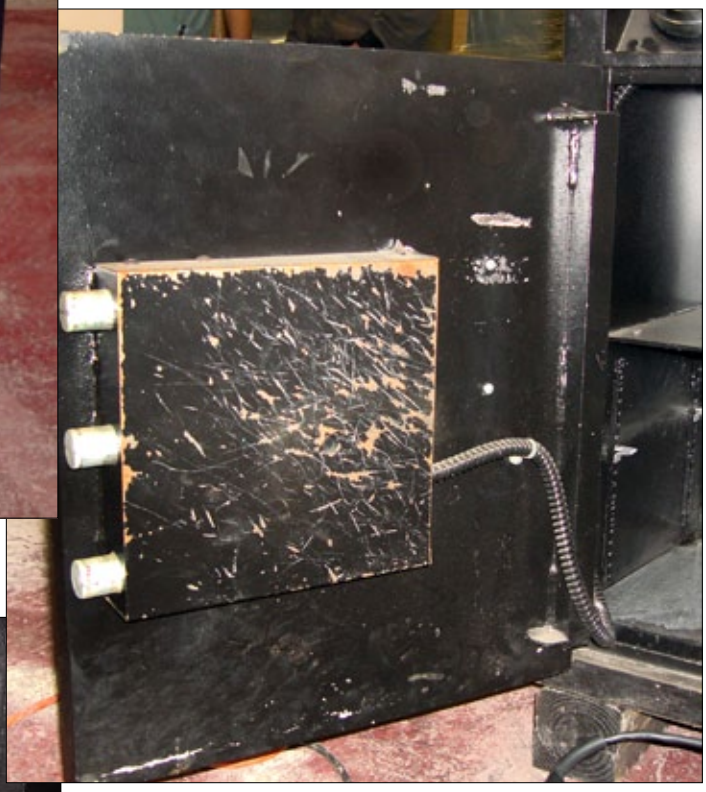

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A FEW OF LIFE'S RULES

You can get more with a smile and a gun,
than you can get with a smile alone.

Light travels faster than sound.
This is why some people appear bright until you hear them speak.

He who laughs lasts, thinks slowest.

Those who live by the sword, get shot by those who don't.

The 50-50-90 Rule:
Anytime you have a 50-50 chance of getting something right,
there's a 90% probability you'll get it wrong.

If the shoe fits, get another one just like it.

The things that come to those who wait,
will be the things left by those who got there first.

Give a man a fish and he will eat for a day.
Teach a man to fish , and he will sit in a boat all day drinking beer.

A fine is a tax for doing wrong. A tax is a fine for doing well.

When you go into court, you are putting yourself in the hands of 12 people,
who weren't smart enough to get out of jury duty.